

### SPACE STATION DATA SYSTEM ANALYSIS/ARCHITECTURE STUDY

Task 4 — System Definition Report

Appendix

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### SPACE STATION DATA SYSTEM ANALYSIS/ARCHITECTURE STUDY

Task 4 — System Definition Report

**Appendix** 

**DECEMBER 1985** 

MDC H1343A REPLACES MDC H1942 DATED MAY 1985 UPDATED AUGUST 1985

### PREFACE

The McDonnell Douglas Astronautics Company has been engaged in a Space Station Data System Analysis/Architecture Study for the National Aeronautics and Space Administration, Goddard Space Flight Center. This study, which emphasized a system engineering design for a complete, end-to-end data system, was divided into six tasks:

- Task 1. Functional Requirements Definition
- Task 2. Options Development
- Task 3. Trade Studies
- Task 4. System Definitions
- Task 5. Program Plan
- Task 6. Study Maintenance

McDonnell Douglas was assisted by the Ford Aerospace and Communications Corporation, IBM Federal Systems Division and RCA in these Tasks. The Task inter-relationship and documentation flow are shown in Figure 1.

This report was prepared for the National Aeronautics and Space Administration Goddard Space Flight Center under Contract No. NAS5-28082

Questions regarding this report should be directed to:

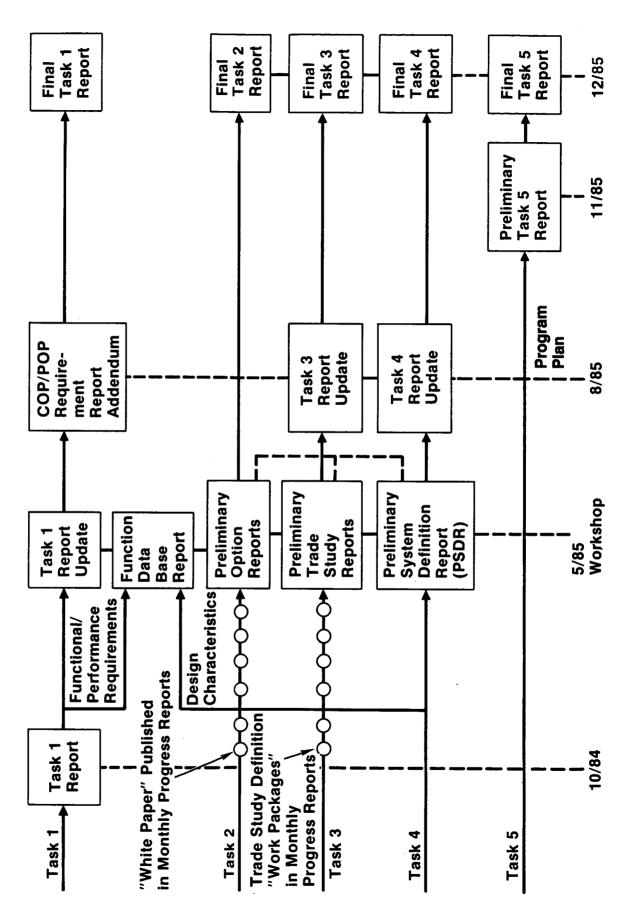
Glen P. Love
Study Manager
McDonnell Douglas Astronautics Company
Huntington Beach, CA 92647
(714) 896-2292

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# SSDS A/A DOCUMENTATION SCHEDULE

Figure 1



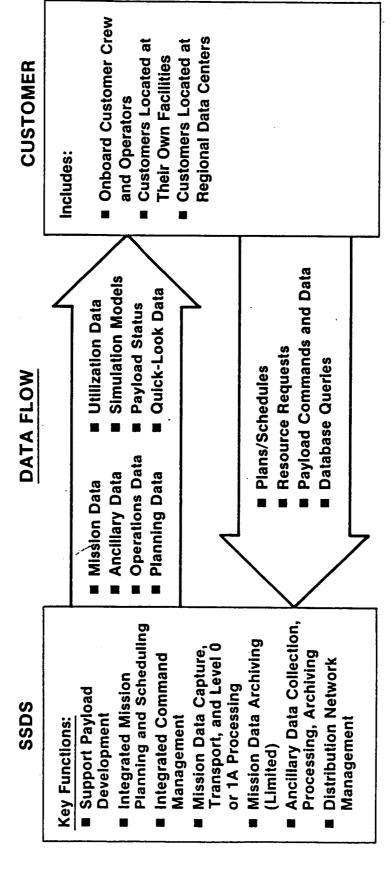
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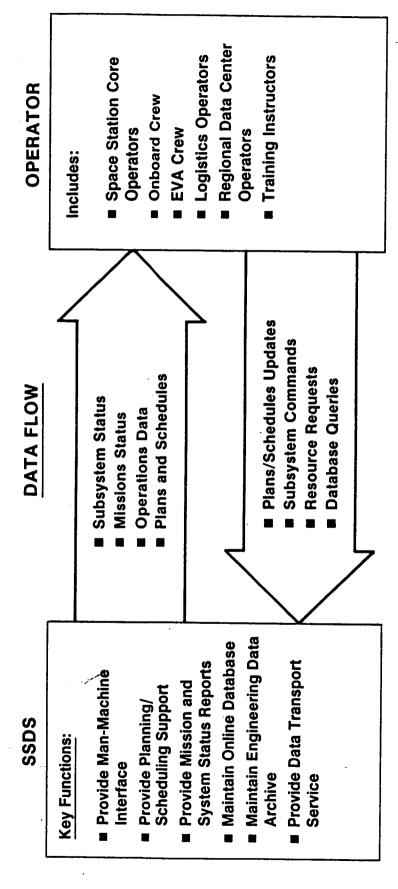
### APPENDIX C

EXTERNAL INTERFACE SPECIFICATION

## SSDS EXTERNAL INTERFACE WITH CUSTOMERS

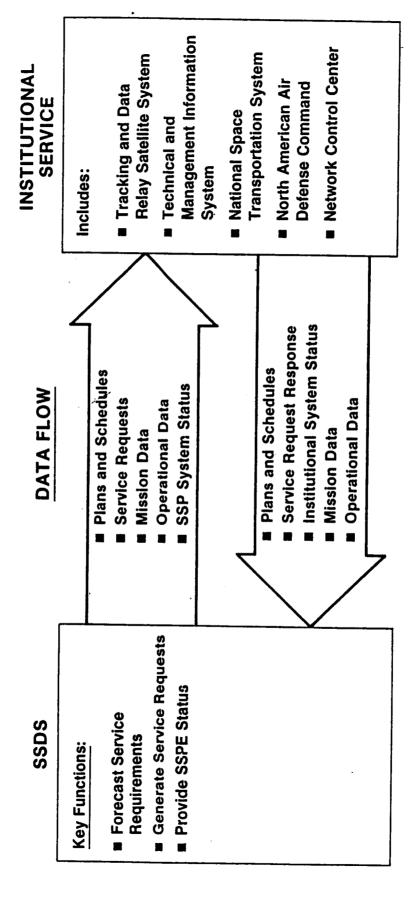


## SSDS EXTERNAL INTERFACE WITH OPERATORS

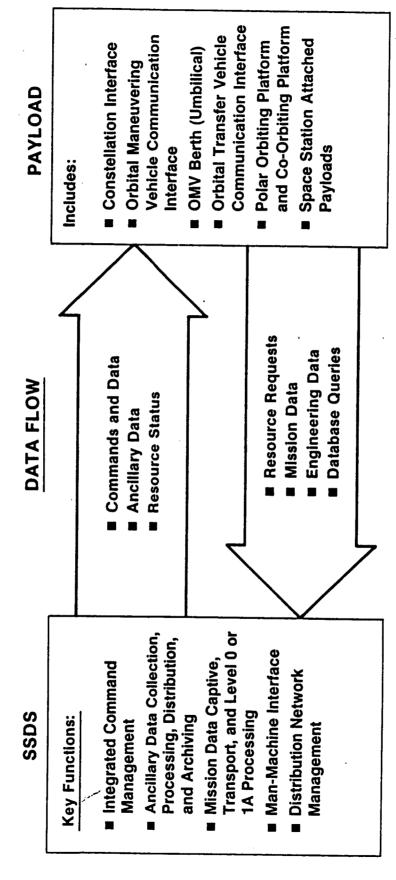


BOWMAN SSDS VHB945

### SSDS EXTERNAL INTERFACE WITH INSTITUTIONAL SERVICES

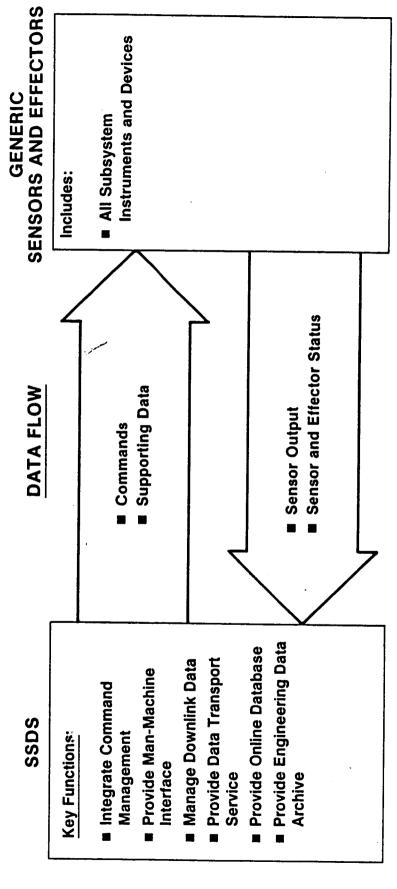


## SSDS EXTERNAL INTERFACE WITH PAYLOADS

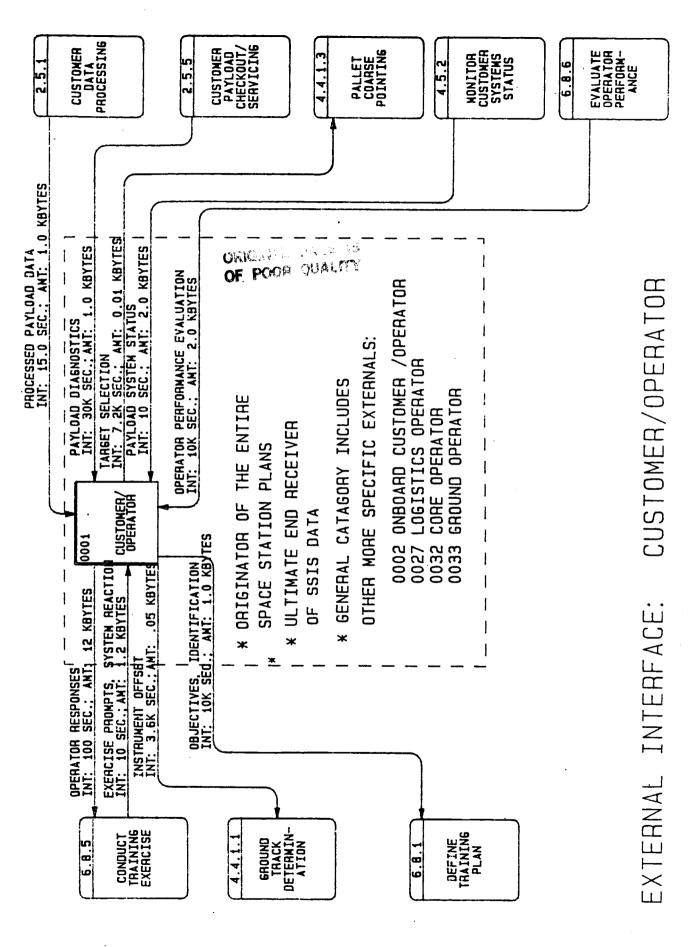


BOWMAN SSDS VHB944

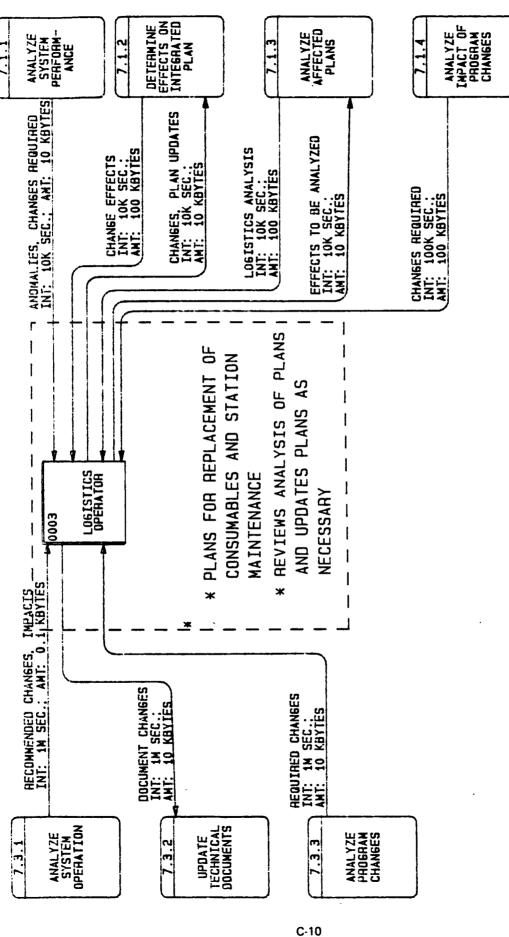
### SUBSYSTEM SENSORS AND EFFECTORS SSDS EXTERNAL INTERFACE WITH



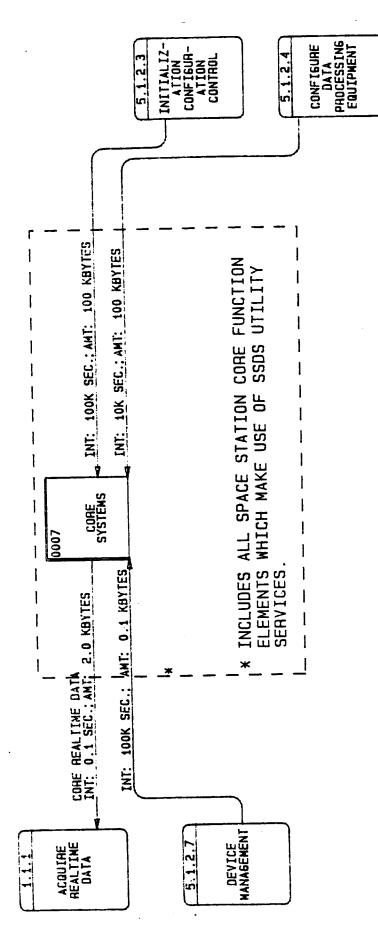
### OPERATORS CUSTOMERS AND



INTERFACE: ONBOARD CUSTOMER/OPERATOR EXTERNAL



OPERATOR LOGISTICS INTERFACE: EXTERNAL

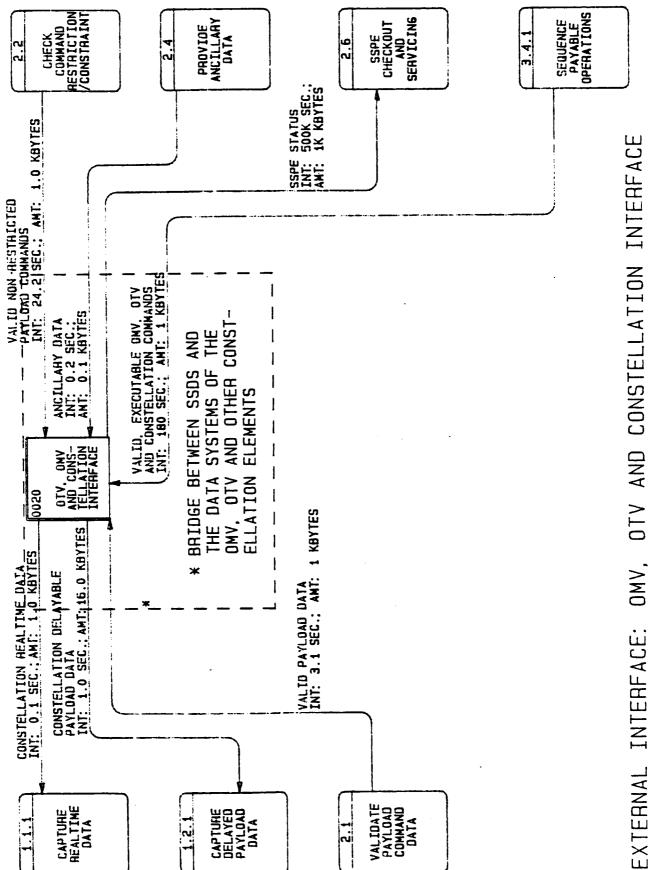


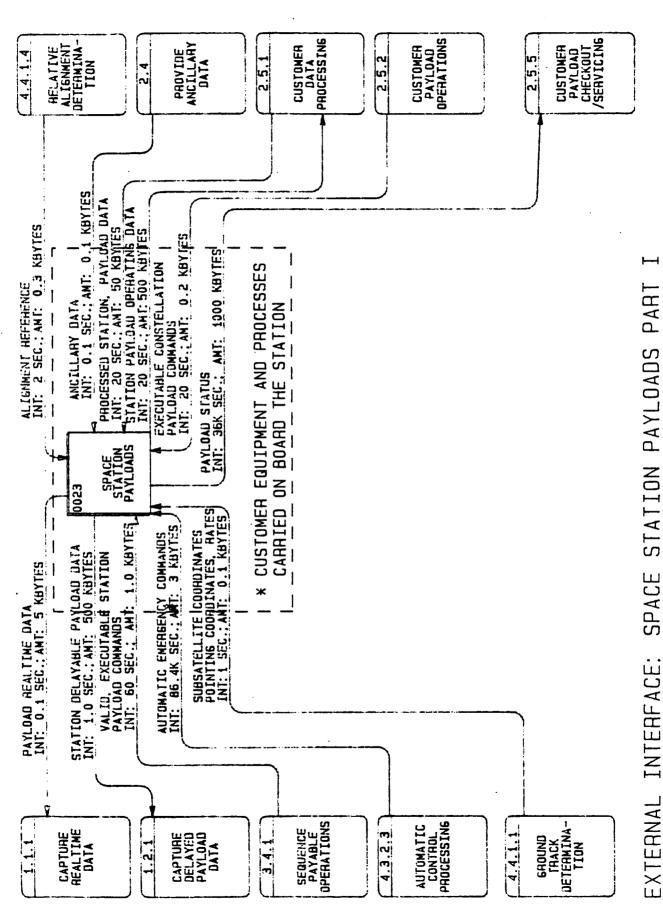
EXTERNAL INTERFACE: CORE SYSTEMS

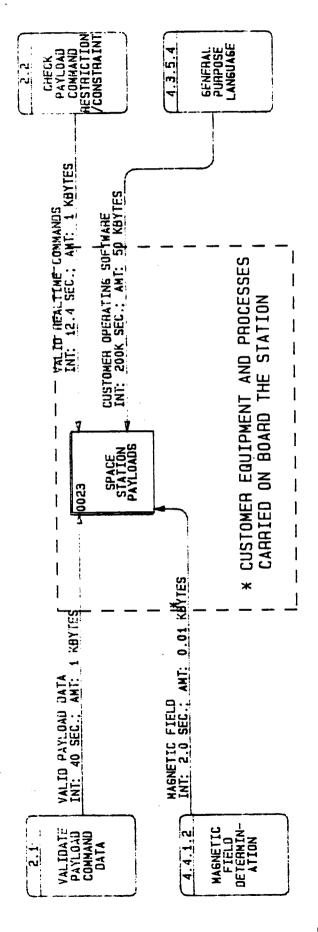
WASTE/BLOOD ANALYSIS EXTERNAL INTERFACE:

PAYLOAD AND CONSTELLATION ELEMENTS EXTERNAL INTERFACE:

### ORIGINAL PAGE IS OF POOR QUALITY CHECK COMMAND RESTRICTION /CONSTRAINT PROVIDE ANCILLARY DATA 2.4 2.6





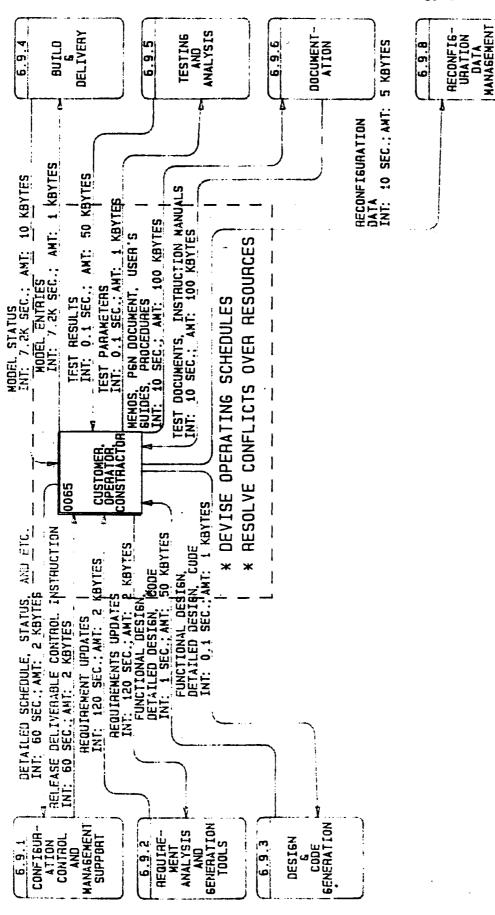


PART PAYLOADS STATION SPACE EXTERNAL INTERFACE:

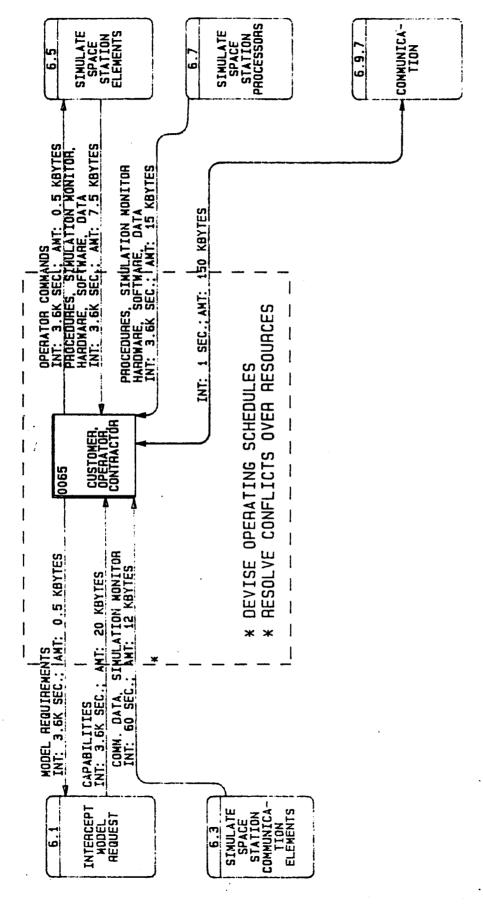
OPERATOR CORE INTERFACE: EXTERNAL

OPERATOR GROUND INTERFACE: EXTERNAL

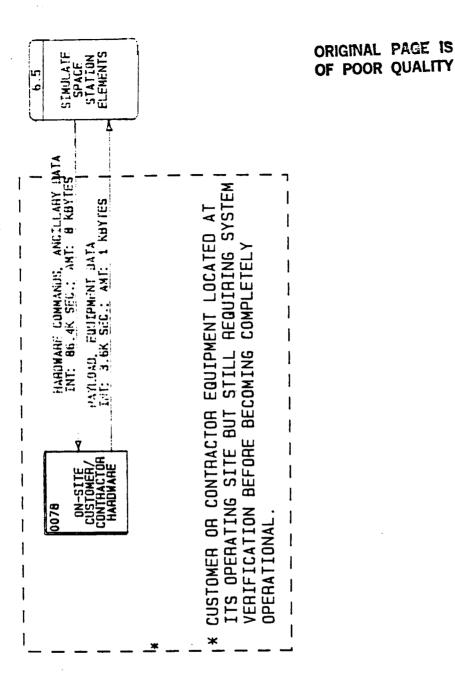
DEVELOPMENT COMMUNICATION INTERFACE EXTERNAL INTERFACE:



PART CONTRACTOR OPERATOR, CUSTOMER, INTERFACE: EXTERNAL



PART OPERATOR, CONTRACTOR CUSTOMER, EXTERNAL INTERFACE:



OFF-SITE CUSTOMER/CONTRACTOR SYSTEM EXTERNAL INTERFACE:

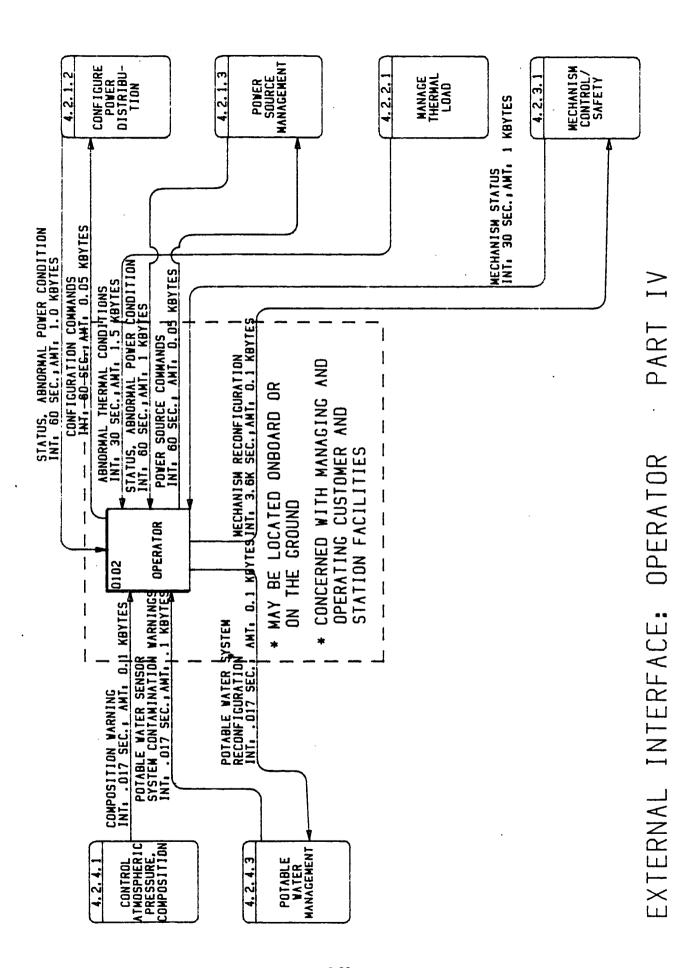
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EXTERNAL INTERFACE: OPERATOR

PART

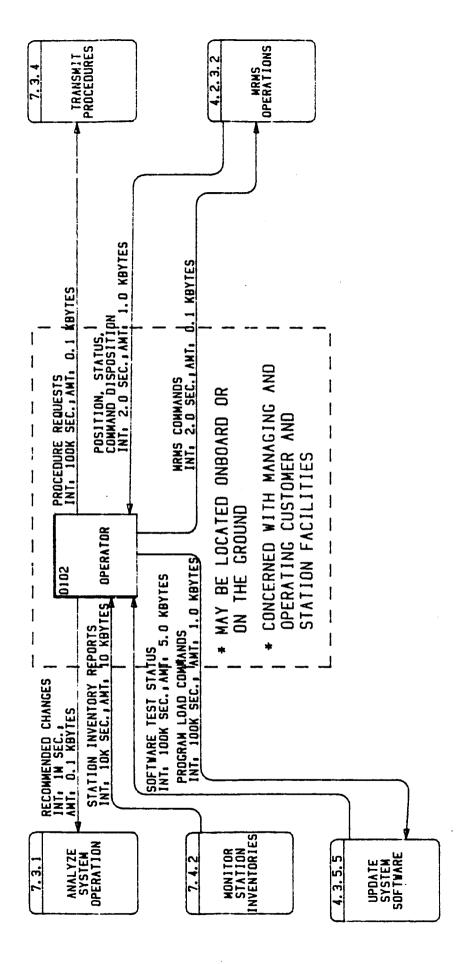
EXTERNAL INTERFACE: OPERATOR PART II

EXTERNAL INTERFACE: OPERATOR PART II

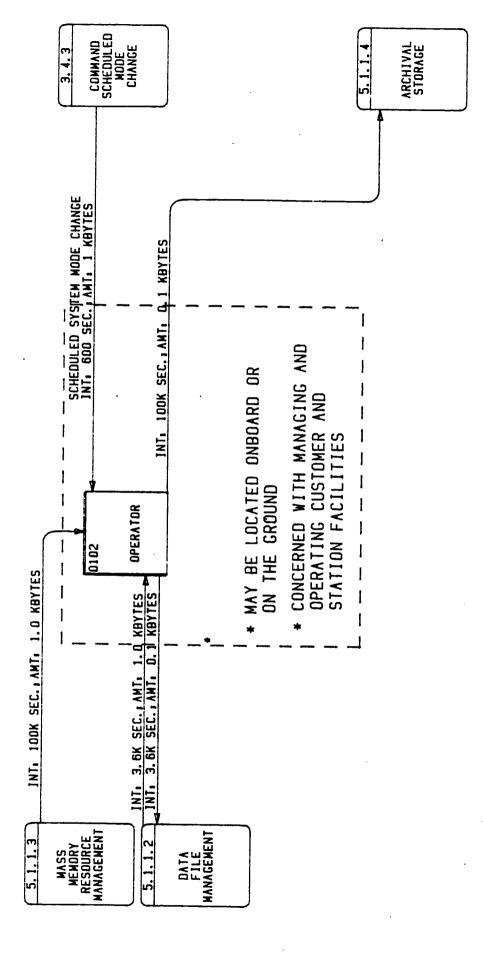


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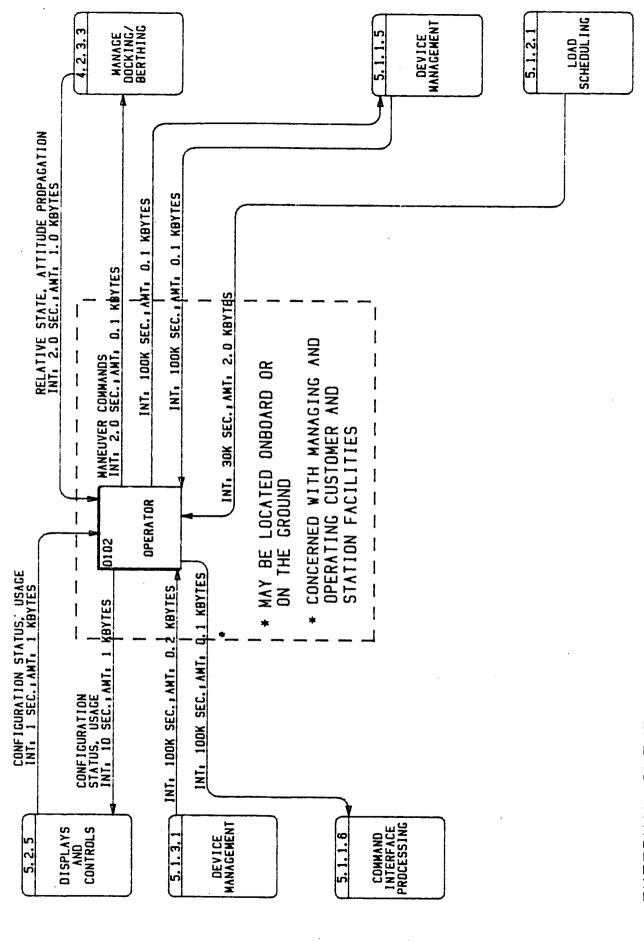
PART OPERATOR INTERFACE: EXTERNAL



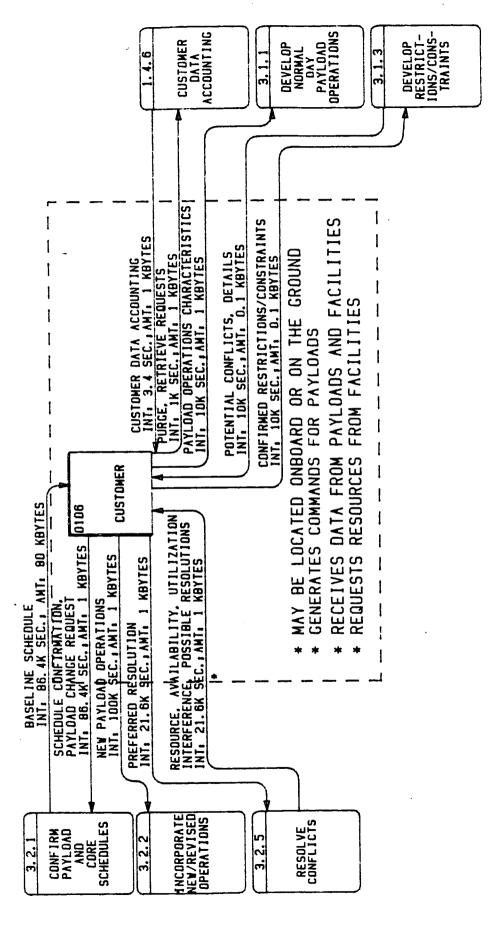
PART OPERATOR EXTERNAL INTERFACE;



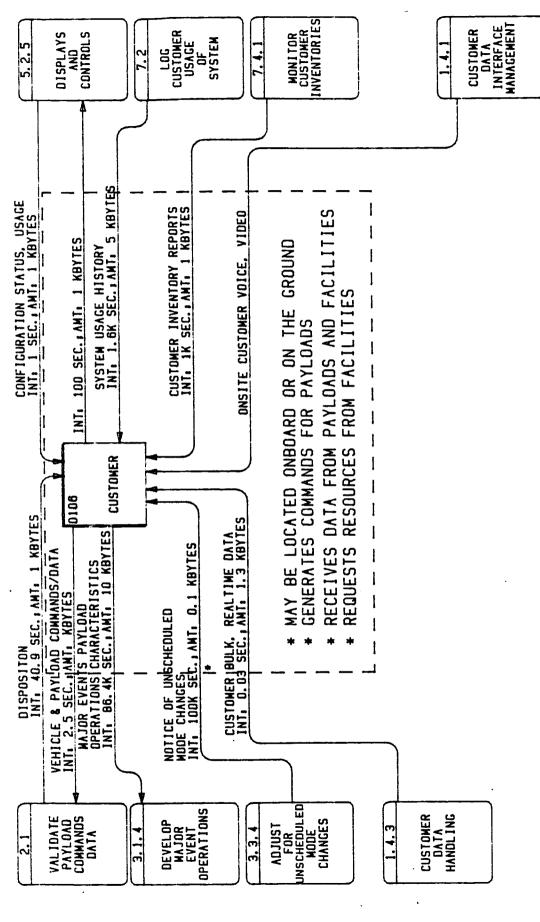
PART EXTERNAL INTERFACE: OPERATOR



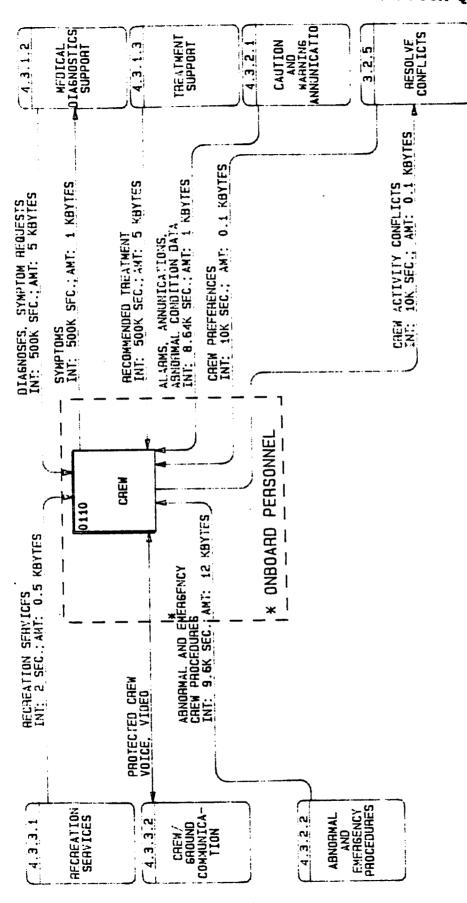
PART OPERATOR EXTERNAL INTERFACE;



CUSTOMER PART INTERFACE: EXTERNAL

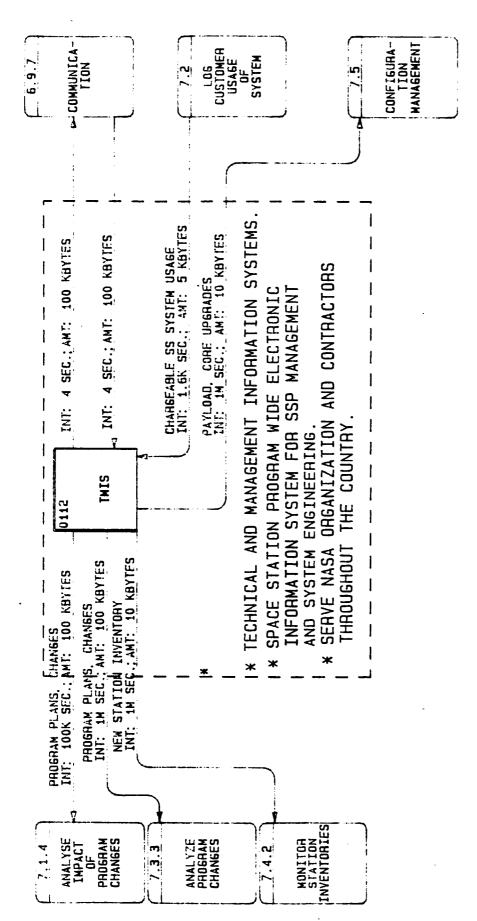


PART CUSTOMER INTERFACE: EXTERNAL



EXTERNAL INTERFACE: CREW

ACE: PHYSIOLOGICAL DATA

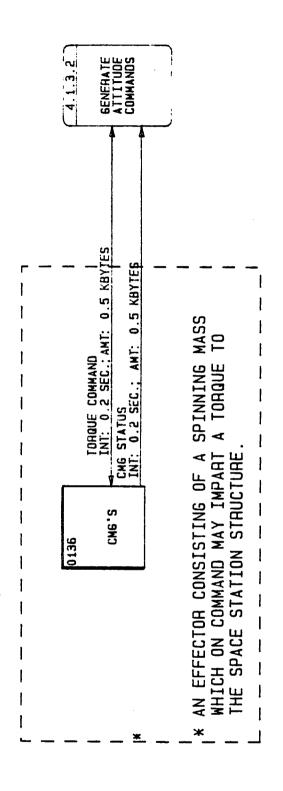


EXTERNAL INTERFACE: TMIS

SENSORS BODY MODE FLEXIBLE INTERFACE: EXTERNAL

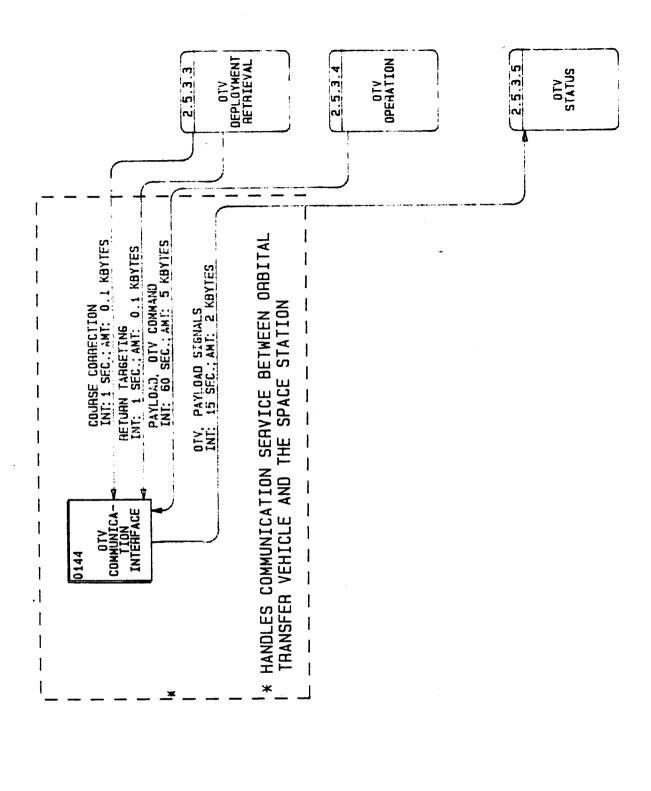
FLIGHT DATA PROCESSING EQUIPMENT EXTERNAL INTERFACE:

GROUND DATA PROCESSING EQUIPMENT EXTERNAL INTERFACE:



CONTROL MOMENT GYROS (CMG'S) EXTERNAL INTERFACE:

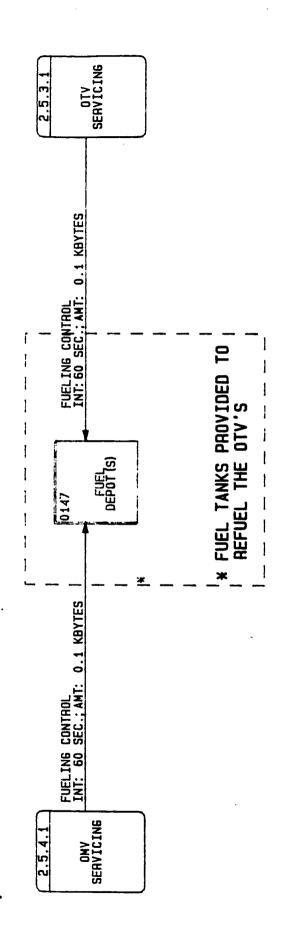
REACTION CONTROL SYSTEM EXTERNAL INTERFACE:



OTV COMMUNICATION INTERFACE EXTERNAL INTERFACE:

CONTROL ATMOSPHERIC REVITALIZATION/TEMPERATURE EXTERNAL INTERFACE:

BERTH OTV EXTERNAL INTERFACE:

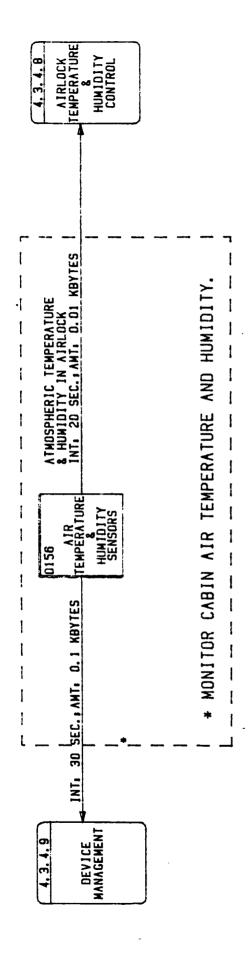


FUEL DEPOT (S) EXTERNAL INTERFACE:

EXTERNAL INTERFACE: CHARGER

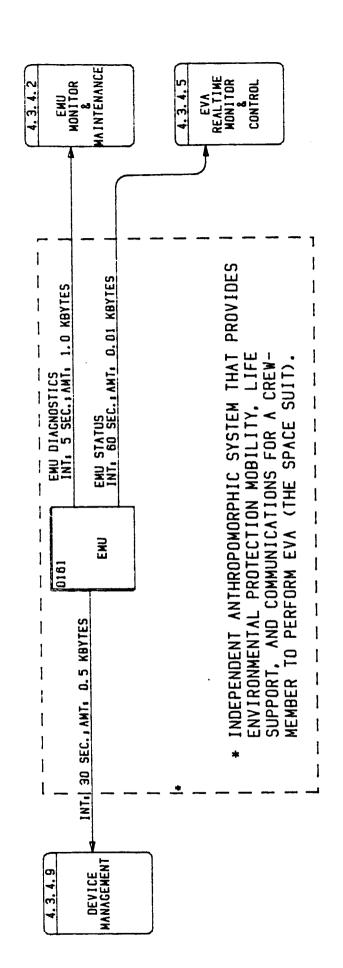
BERTH 0MV EXTERNAL INTERFACE:

OMV COMMUNICATION INTERFACE EXTERNAL INTERFACE:



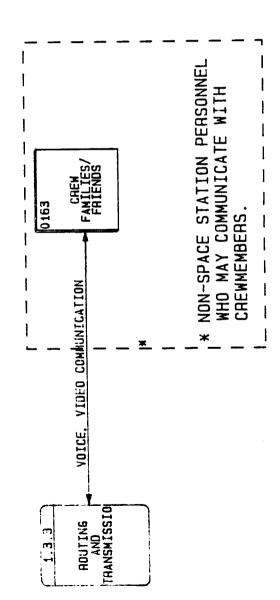
AND COMPOSITION SENSORS PRESSURE AIR EXTERNAL INTERFACE:

IN AIRLOCK CONTAMINATION SENSORS EXTERNAL INTERFACE:

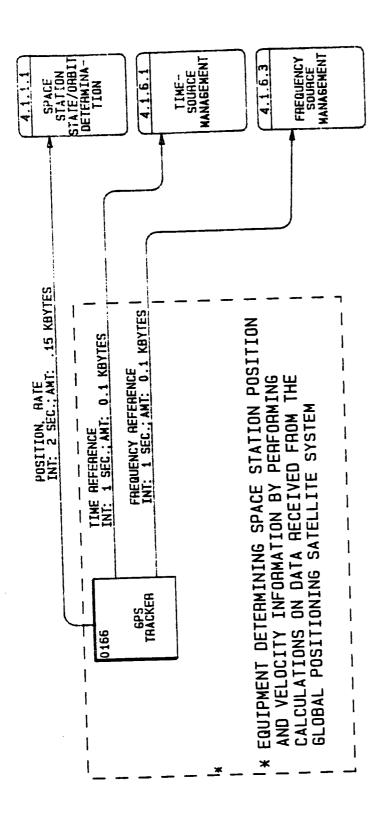


C-55

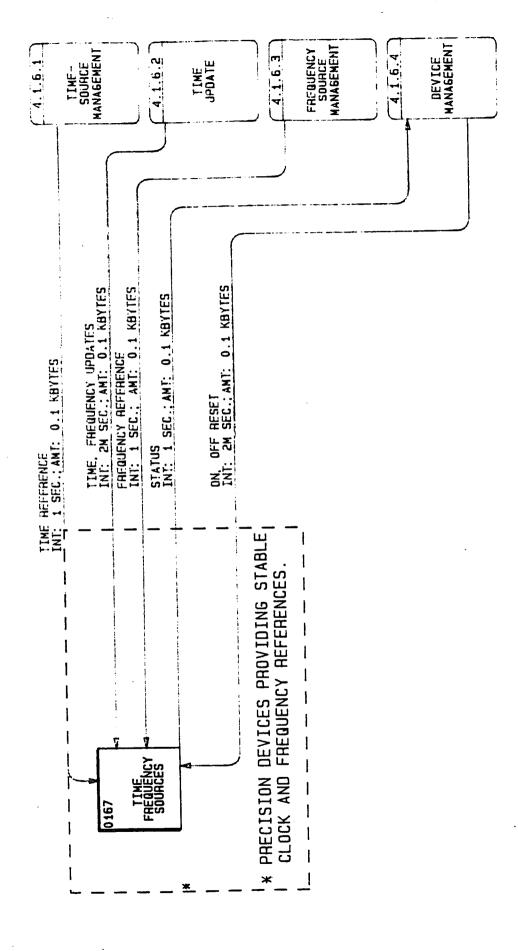
CONTROL AIRLOCK ATMOSPHERE INTERFACE:



EXTERNAL INTERFACE: RATE GYROS

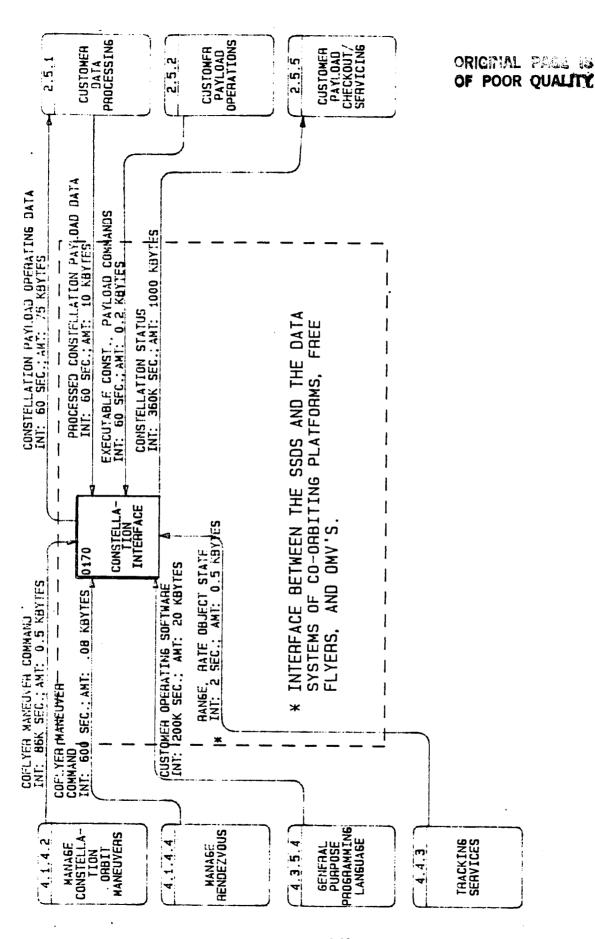


TRACKER GPS EXTERNAL INTERFACE:



FREQUENCY SOURCES TIME, EXTERNAL INTERFACE:

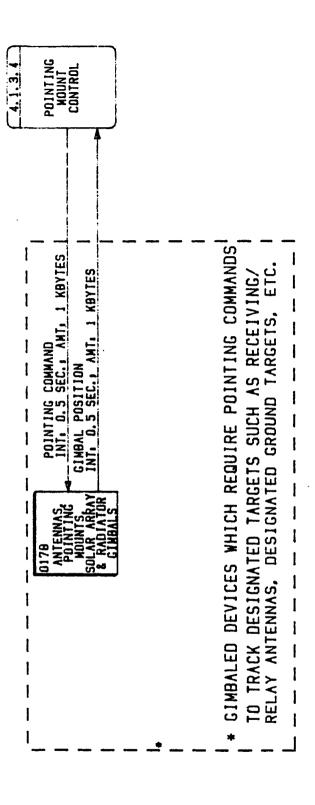
OBJECT ACCOUNTING



CONSTELLATION INTERFACE EXTERNAL INTERFACE:

EXTERNAL INTERFACE: TDRSS

STAR TRACKER EXTERNAL INTERFACE:



SOLAR ARRAY AND POINTING MOUNTS, GIMBALS ANTENNAS, RADIATOR G EXTERNAL INTERFACE:

SYSTEM TETHER EXTERNAL INTERFACE:

EXTERNAL INTERFACE: LONG RANGE TRACKER

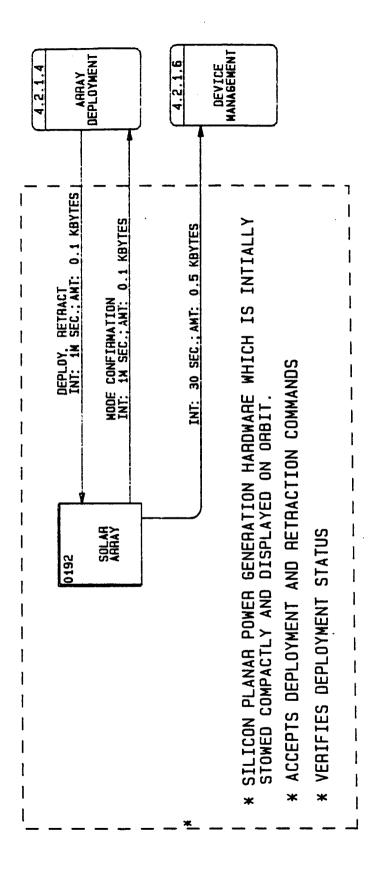
PROXIMITY TRACKER EXTERNAL INTERFACE:

SYSTEM REGULATOR ARRAY INTERFACE: EXTERNAL

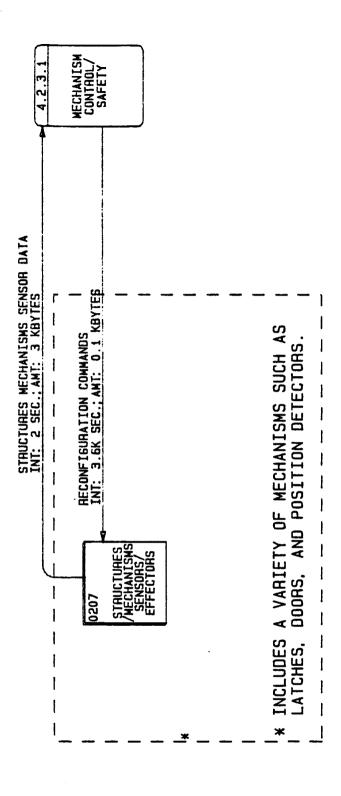
EXTERNAL INTERFACE: POWER SOURCE CONFIGURATION SWITCH GEAR

ENERGY STORAGE UNITS EXTERNAL INTERFACE:

DISTRIBUTION/LOAD SWITCHES EXTERNAL INTERFACE:



SOLAR ARRAY EXTERNAL INTERFACE:



STRUCTURES/MECHANISMS SENSORS/EFFECTORS EXTERNAL INTERFACE:

EXTERNAL INTERFACE: MRMS

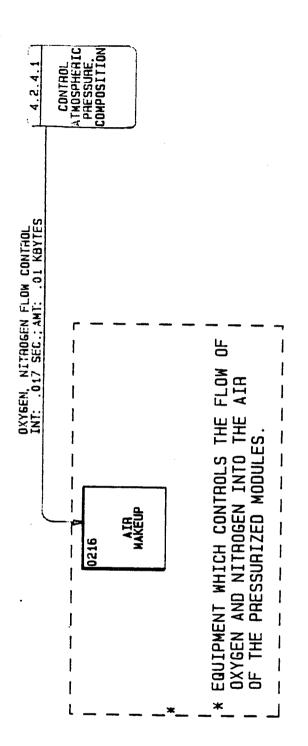
OBJECT/COFLYER EXTERNAL INTERFACE:

DOCKING PORT EXTERNAL INTERFACE:

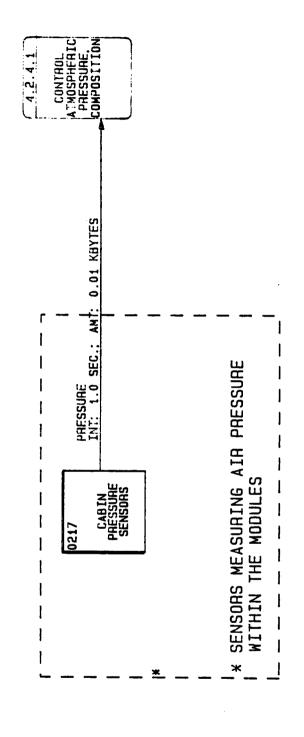
FIRE CONTROL SYSTEM EXTERNAL INTERFACE:

FIRE DETECTION AND CONTROL

C-79

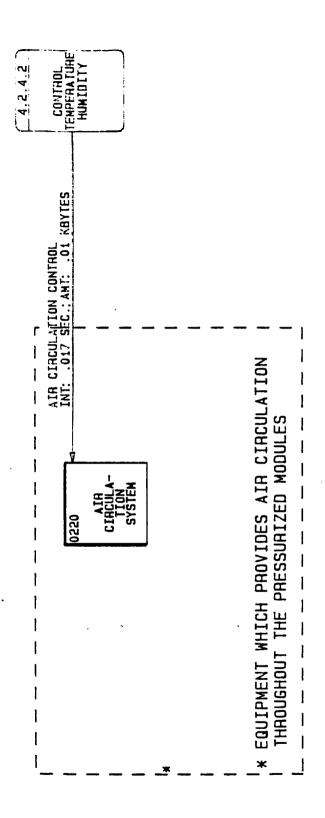


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POTABLE WATER SUPPLY SYSTEM EXTERNAL INTERFACE:

GREY WATER SYSTEM EXTERNAL INTERFACE:



AIR CIRCULATION SYSTEM EXTERNAL INTERFACE:

CONTROL TEMPERATURE HUMIDITY

C-85

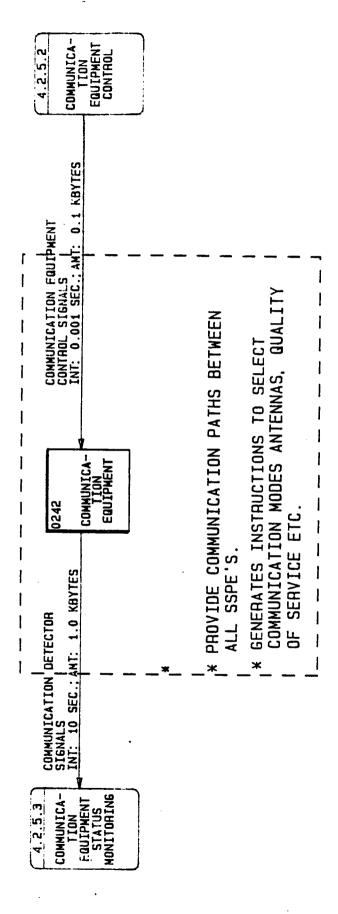
AND COMPOSITION SENSORS TEMPERATURE EXTERNAL INTERFACE:

SENSORS TOXICITY AIR EXTERNAL INTERFACE:

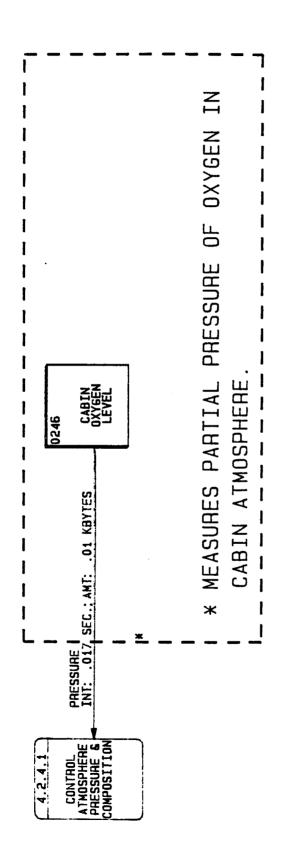
LOOPS RADIATOR FLUID AND BUS EXTERNAL INTERFACE:

BUS AND RADIATOR FLUID CONTROL EXTERNAL INTERFACE:

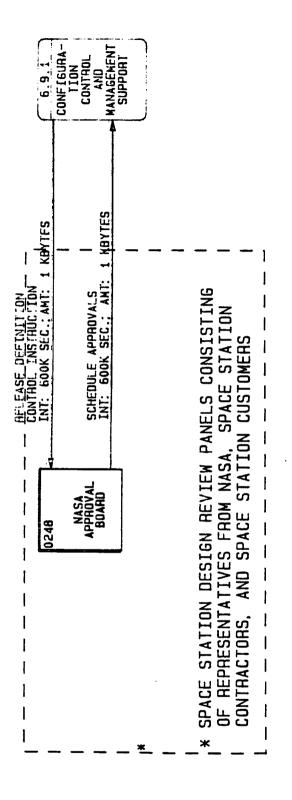
PAYLOAD SIDE INTERFACE HEAT EXCHANGER EXTERNAL INTERFACE:



COMMUNICATION EQUIPMENT EXTERNAL INTERFACE:



EXTERNAL INTERFACE: CABIN OXYGEN LEVEL



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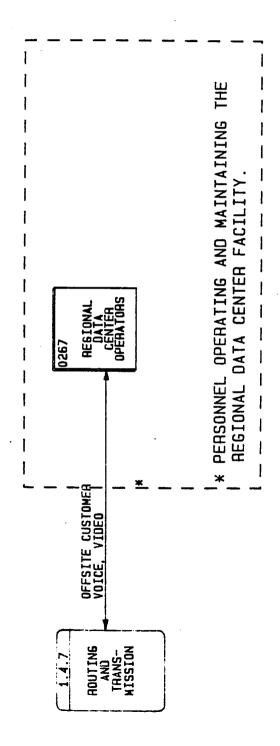
NSTS MISSION CONTROL EXTERNAL INTERFACE:

EXTERNAL INTERFACE: MAGNETOMETERS

EXTERNAL INTERFACE: MAGNETIC TORQUERS

EXTERNAL INTERFACE: PALLET

EXTERNAL INTERFACE: ENVIRONMENT MONITOR SENSORS



EXTERNAL INTERFACE: REGIONAL DATA CENTER OPERATORS

EXTERNAL INTERFACE: TRAINING INSTRUCTOR

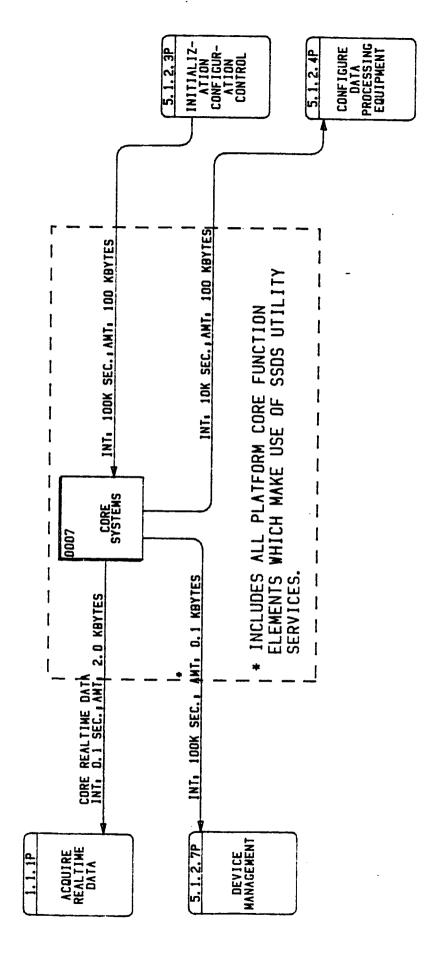
EXTERNAL INTERFACE: ALIGNMENT SENSORS

CUSTOMER OFFSITE EXTERNAL INTERFACE:

APPENDIX C (PLATFORM)

EXTERNAL INTERFACE SPECIFICATION

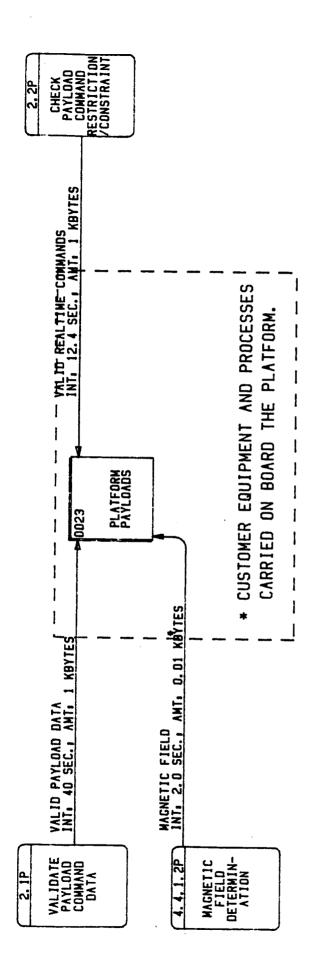
CUSTOMER/OPERATOR INTERFACE: EXTERNAL



EXTERNAL INTERFACE: CORE SYSTEMS

EXTERNAL INTERFACE: PLATFORM PAYLOADS

PAHT



PART PLATFORM PAYLOADS EXTERNAL INTERFACE:

OPERATOR CORE EXTERNAL INTERFACE:

OPERATOR GROUND INTERFACE: EXTERNAL

DEVELOPMENT COMMUNICATION INTERFACE EXTERNAL INTERFACE:

3.2.1P

COMMUNICATION SCHEDULES INT. 86.4K SEC., AMT: 1.2 KBYTES

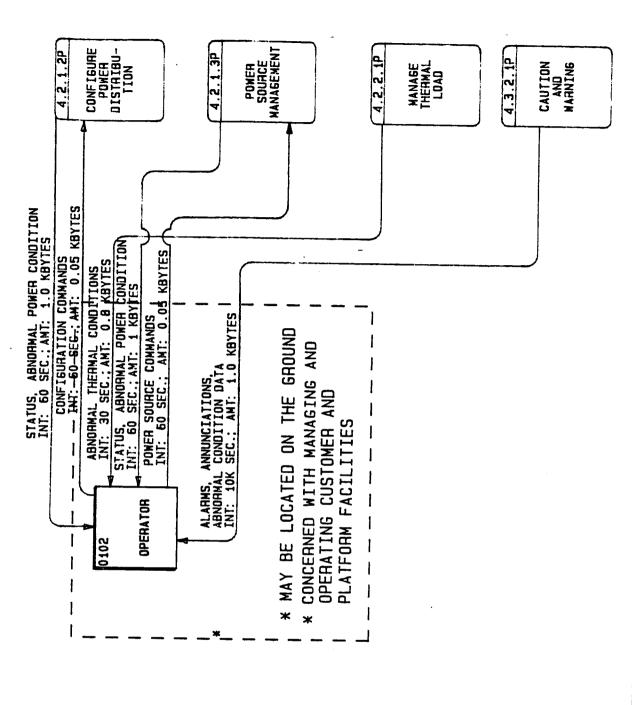
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EXTERNAL INTERFACE: OPERATOR

PART

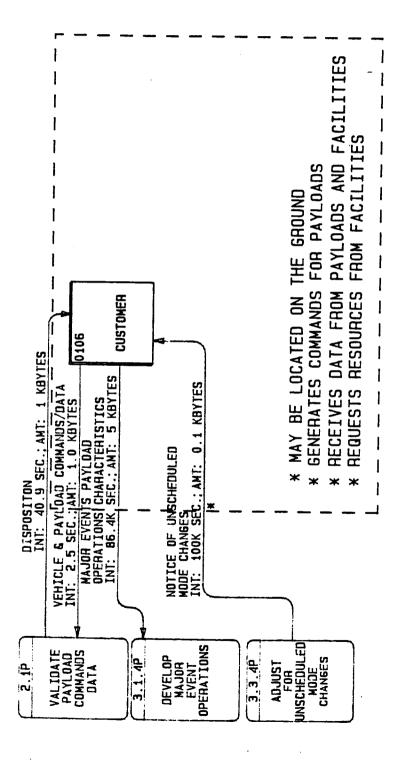
EXTERNAL INTERFACE: OPERATOR PART II



PART OPERATOR INTERFACE: EXTERNAL

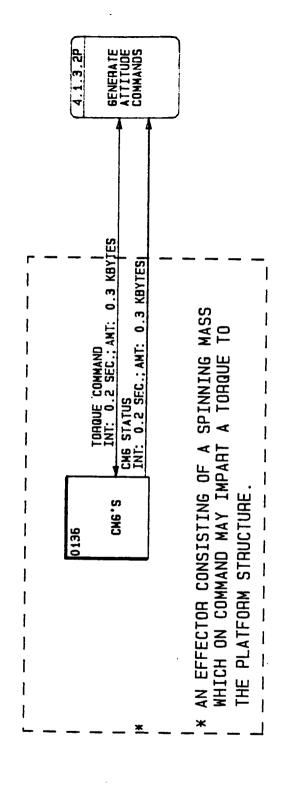
PART OPERATOR INTERFACE: EXTERNAL

PART CUSTOMER INTERFACE: EXTERNAL



PART CUSTOMER INTERFACE: EXTERNAL

FLEXIBLE BODY MODE SENSORS EXTERNAL INTERFACE:



CONTROL MOMENT GYROS (CMG'S) EXTERNAL INTERFACE:

EXTERNAL INTERFACE: REACTION CONTROL SYSTEM

EXTERNAL INTERFACE: RATE GYROS

TRACKER 6PS EXTERNAL INTERFACE:

FREQUENCY SOURCES TIME, EXTERNAL INTERFACE:

EXTERNAL INTERFACE: TDRSS

STAR TRACKER EXTERNAL INTERFACE:

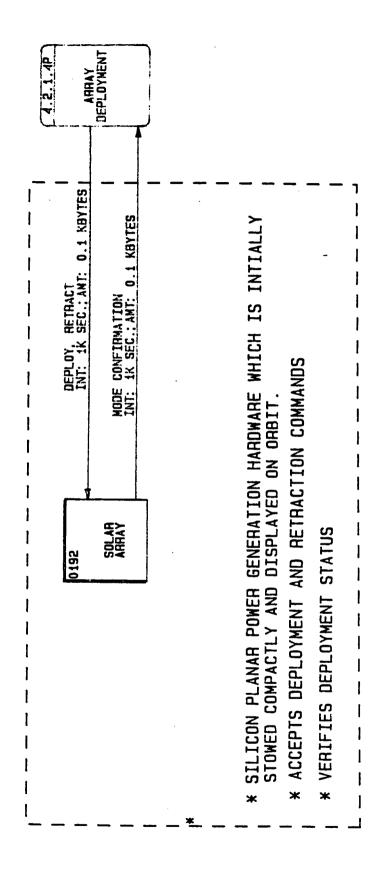
ANTENNAS, POINTING MOUNTS, SOLAR ARRAY AND RADIATOR GIMBALS EXTERNAL INTERFACE:

ARRAY REGULATOR SYSTEM EXTERNAL INTERFACE:

SOURCE CONFIGURATION SWITCH GEAR POWER EXTERNAL INTERFACE:

ENERGY STORAGE UNITS EXTERNAL INTERFACE:

DISTRIBUTION/LOAD SWITCHES EXTERNAL INTERFACE:



SOLAR ARRAY EXTERNAL INTERFACE:

C-131

4.2.2.1P

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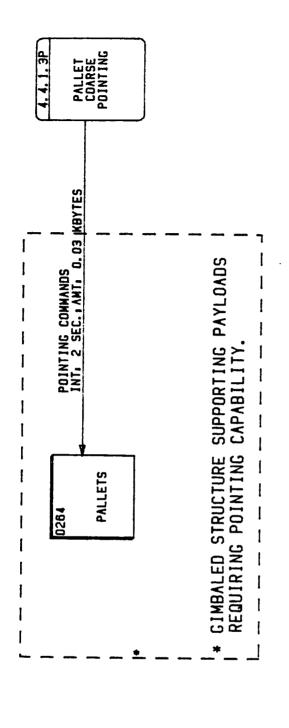
C-132

BUS AND RADIATOR FLUID CONTROL EXTERNAL INTERFACE:

PAYLOAD SIDE INTERFACE HEAT EXCHANGER EXTERNAL INTERFACE:

COMMUNICATION EQUIPMENT EXTERNAL INTERFACE:

EXTERNAL INTERFACE: MAGNETIC TORQUERS



EXTERNAL INTERFACE: ENVIRONMENT MONITOR SENSORS

EXTERNAL INTERFACE: ALIGNMENT SENSORS

## APPENDIX D

## DATA FLOW DIAGRAMS

## Appendix D Data Flow Diagrams

Data flow diagrams have been developed to show the relationship among functions in the SSDS functions list. These diagrams show the logical design of the system without concern for the physical design.

The data flow diagram conventions used in Structural Systems Analysis were explained briefly in the task 1 report. That explanation is repeated here for the convenience of the reader.

Structured Systems Analysis (SSA) has been used extensively throughout the SSDS study to develop the logical operation of the system. Data flow diagrams are used to provide a graphic presentation of the results of SSA, and to show the overall working of the system being analyzed. There are four conventions used in data flow diagrams, as illustrated in Figure D-1.

- External agencies enter data into the system and receive data from the system. They do not otherwise interact with the system. External agencies are designated by squares with a double line at the top and left. For simplicity of the diagram, an external agency may be duplicated on the diagram. A diagonal line across the bottom right corner indicates a duplication.
- Processes transform flows of data, usually in some fundamental way that alters its form and content. A process is designated by a rounded corner rectangle. A process enclosed by a dashed line represents an interconnection to another data flow diagram. The enclosed function is on another branch of the functions tree. It appears on another data flow diagram with its complete logical interconnections.

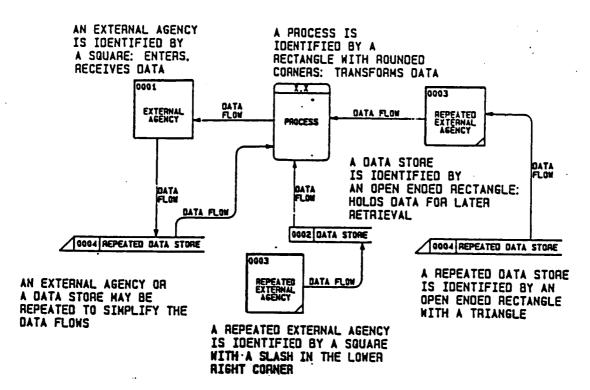


Figure D-1. DFD Symbol Conventions

- <u>Data Stores</u> contain data to be made available to other processes when the processes do not necessarily take place in immediate sequence. Therefore, the data in a data store should have a significant lifetime. Data stores are designated by extended, open sided rectangles. Data stores may also be duplicated to simplify the diagram.
- <u>Data Flows</u> identify the data moving among processes, data stores and external agencies. The data flows are designated by labeled arrows.

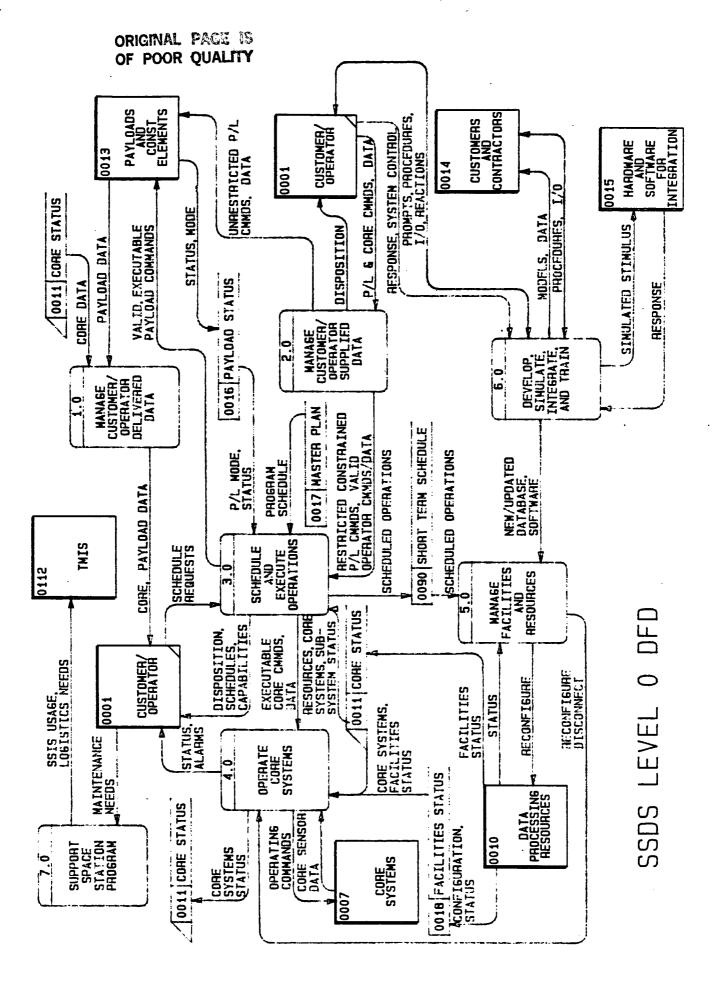
Structured systems analysis is used to develop multiple levels of detail to describe what the system does. The top level (Level 0 DFD) shows the entire system in its simplest form. The level 0 analysis concentrates on the end-to-end paths connecting external agencies. It becomes an outwardly focused description, focusing on the questions, "Who will be using the system?", "What do they want the system to do?", and "What are the major data input to the system?" The processes depicted are very top level and generic. Subsequent levels of DFDs will add progressively more detail.

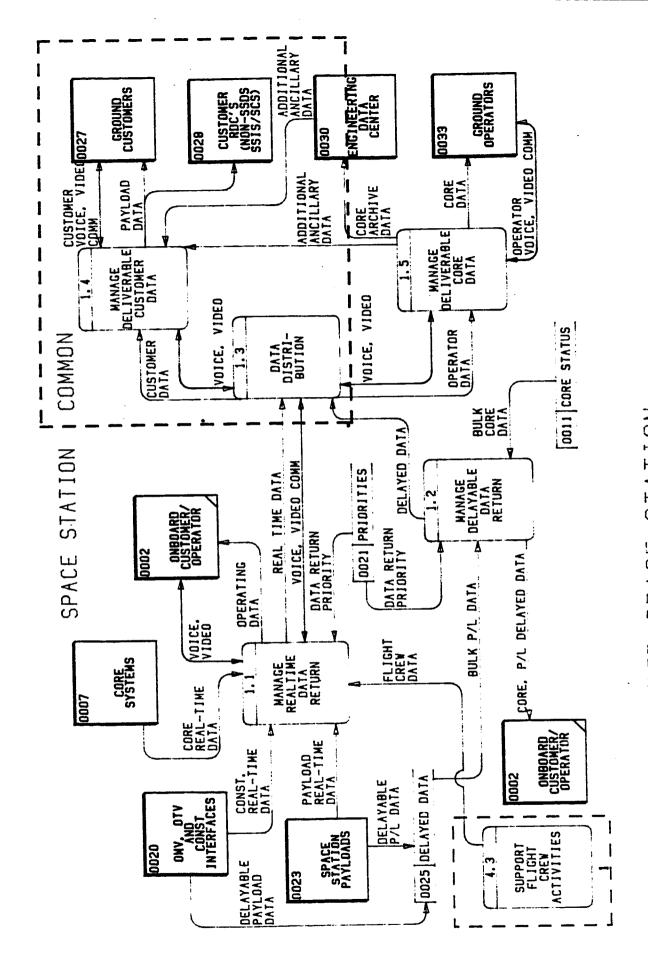
The data flow diagrams contained in this appendix are the complete set describing the SSDS. The diagrams are hierarchial in order.

- The level zero diagram depicts the entire system at the topmost level.
- Level one diagrams expand the detail for each of the seven top level functions.
- Level two diagrams provide further detail on subfunctions. In general, there is a level two diagram for each two—digit function in the functions list (e.g., 4.2) having further subdivisions. The two exceptions are functions 2.3, for which the next lower level diagram is trivial, and 5.1, for which there is little functional interconnection.
- Level three diagrams provide further detail for those functions having four digit subdivisions, such as 4.1.1 Navigation.

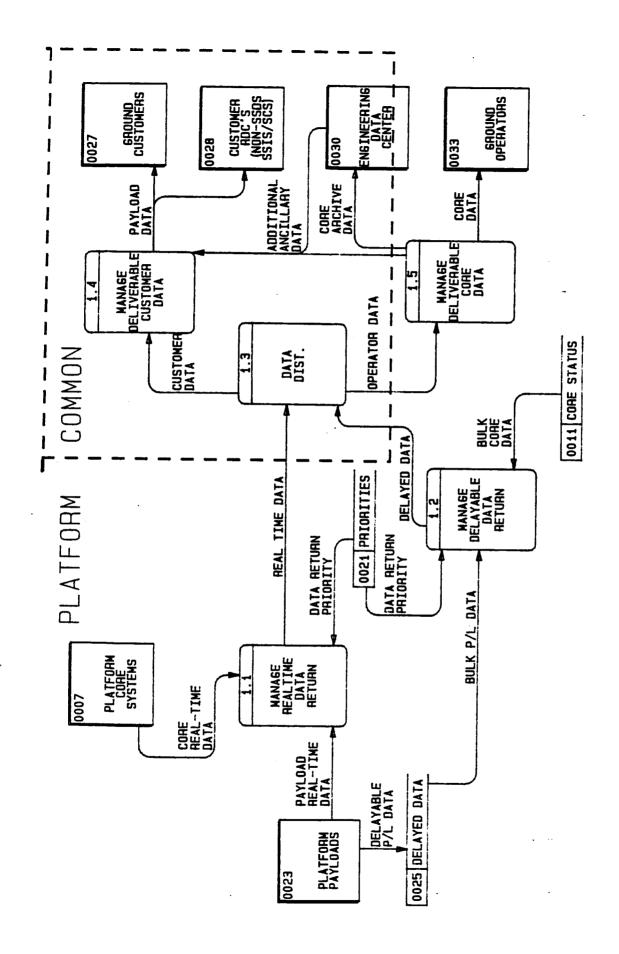
With the above noted exceptions, each functions in the functions list appear on a data flow diagram.

The data dictionary entries in Appendix E present supporting data to aid in interpreting the data flow diagrams. Input/output rates are shown in Appendix A-9 of the task 1 report.

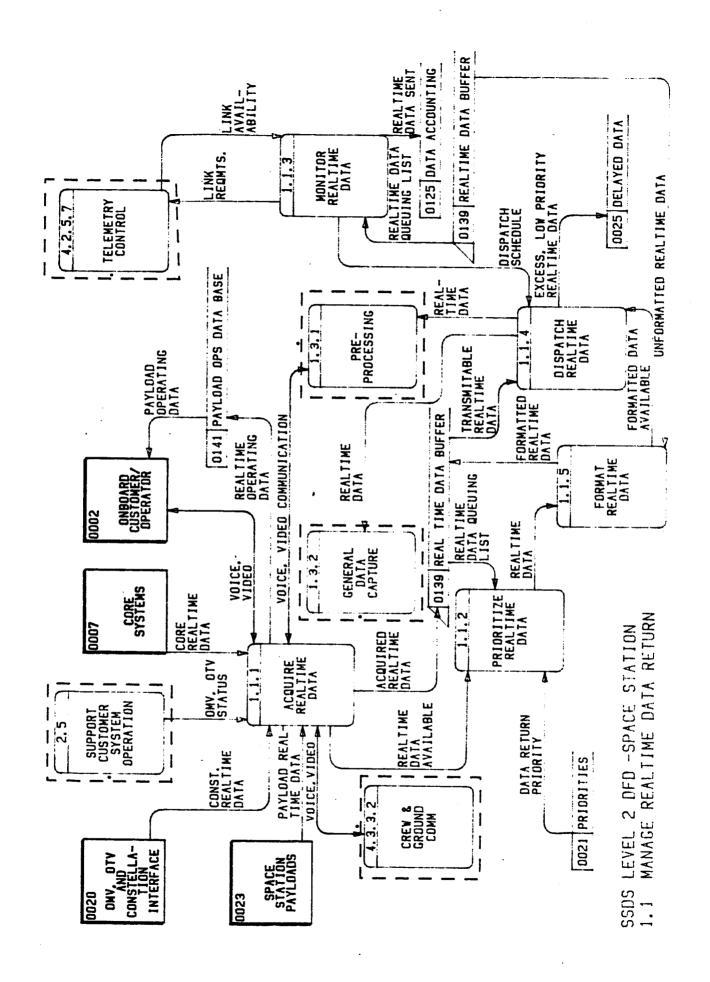


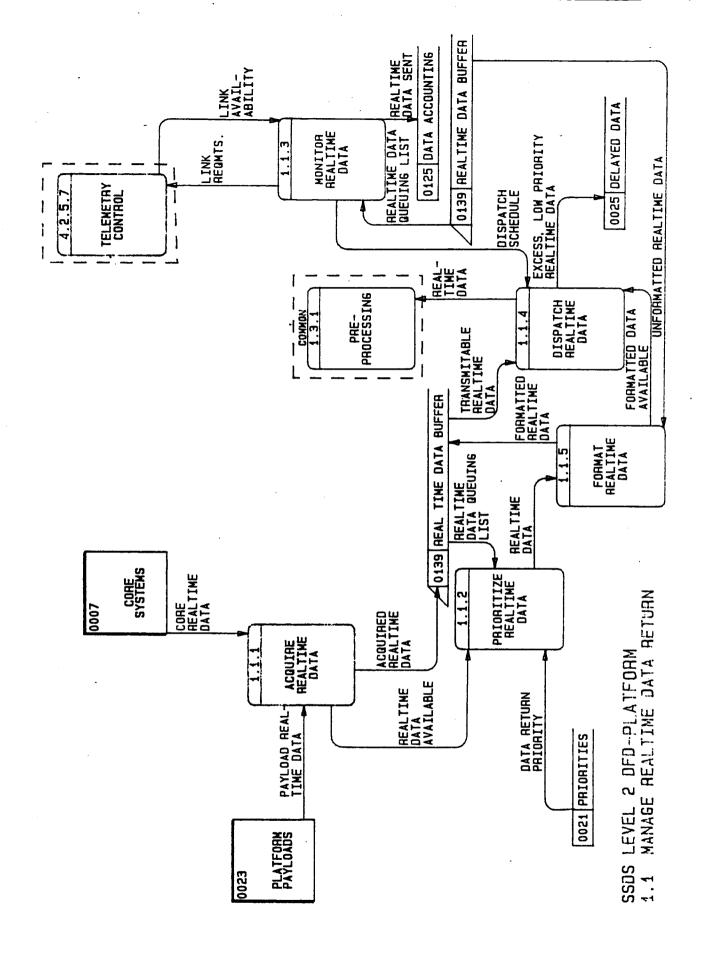


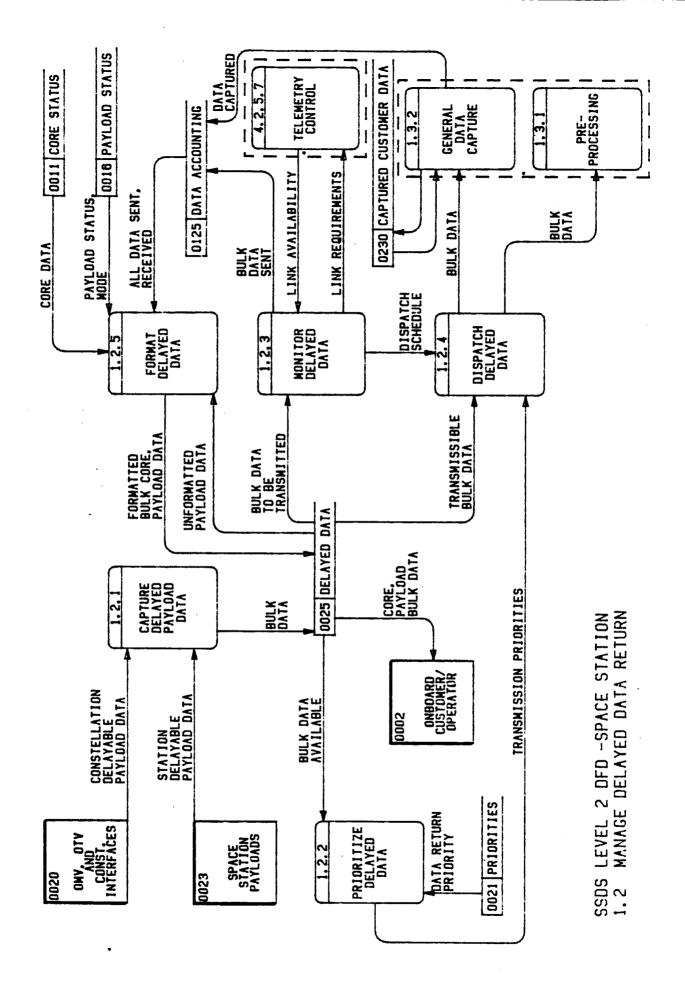
DATA DEL IVERED SSDS LEVEL 1 DFD-SPACE 1.0 MANAGE CUSTOMER/OPERATOR

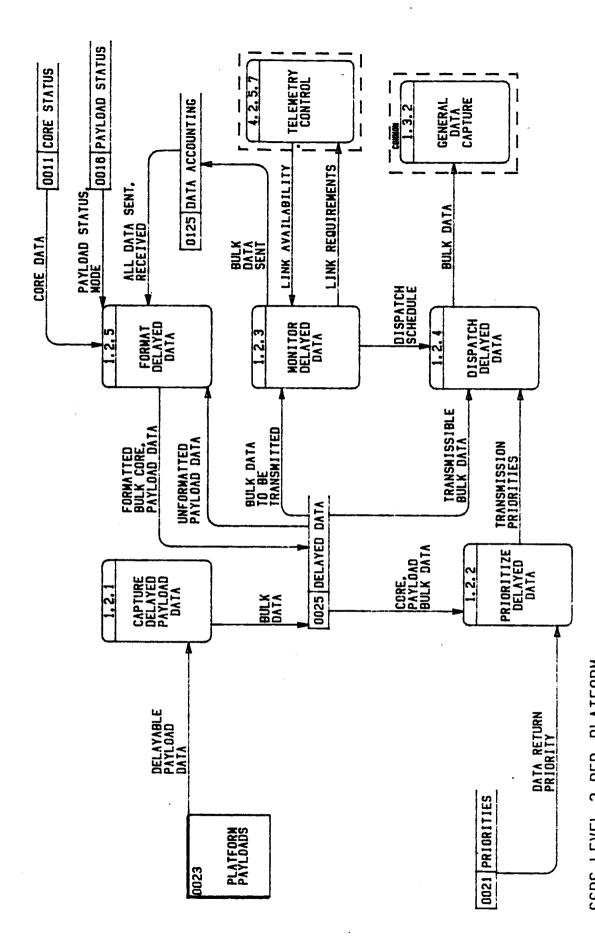


1 DFD-PLATFORMS CUSTOMER/OPERATOR DELIVERED DATA SSDS LEVEL 1.0 MANAGE FIGURE 6-9

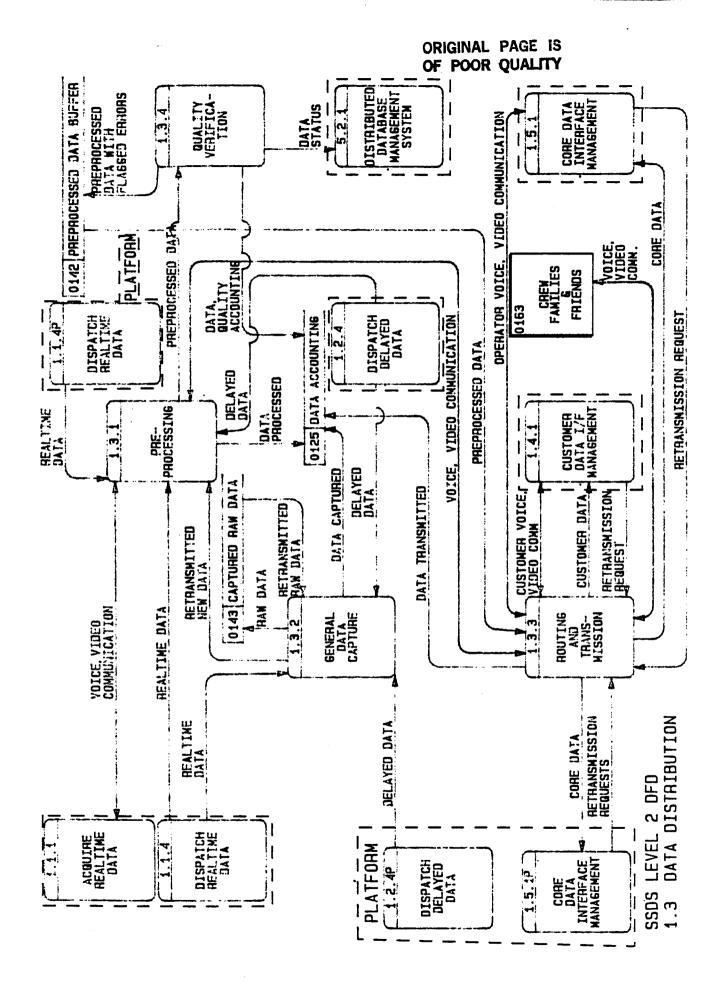


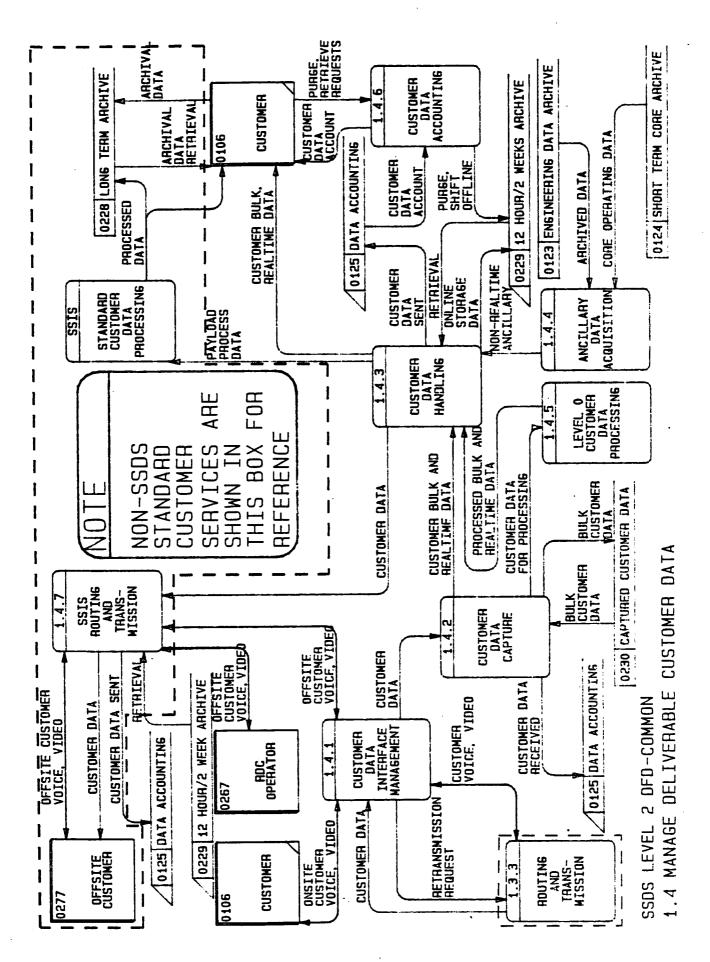


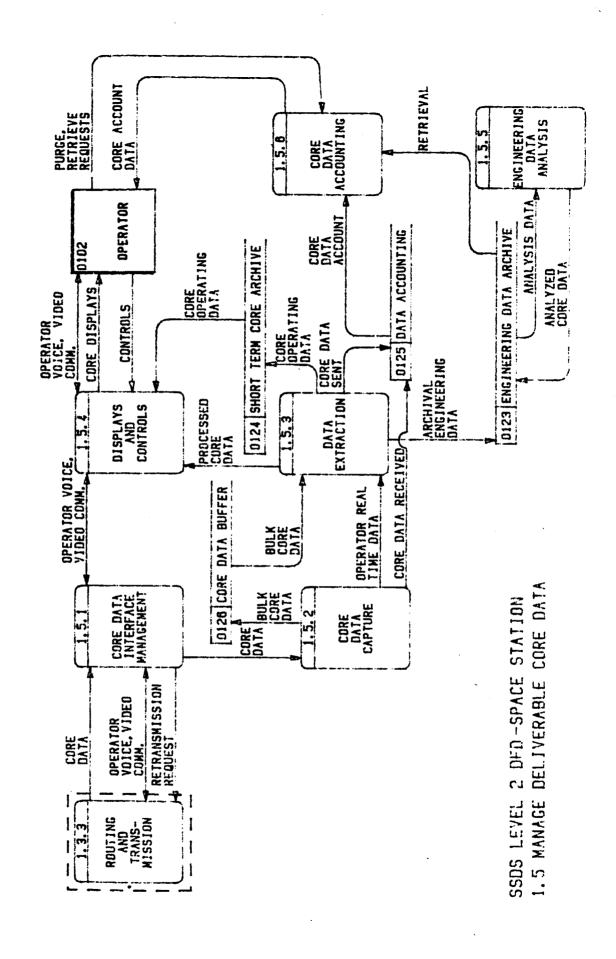


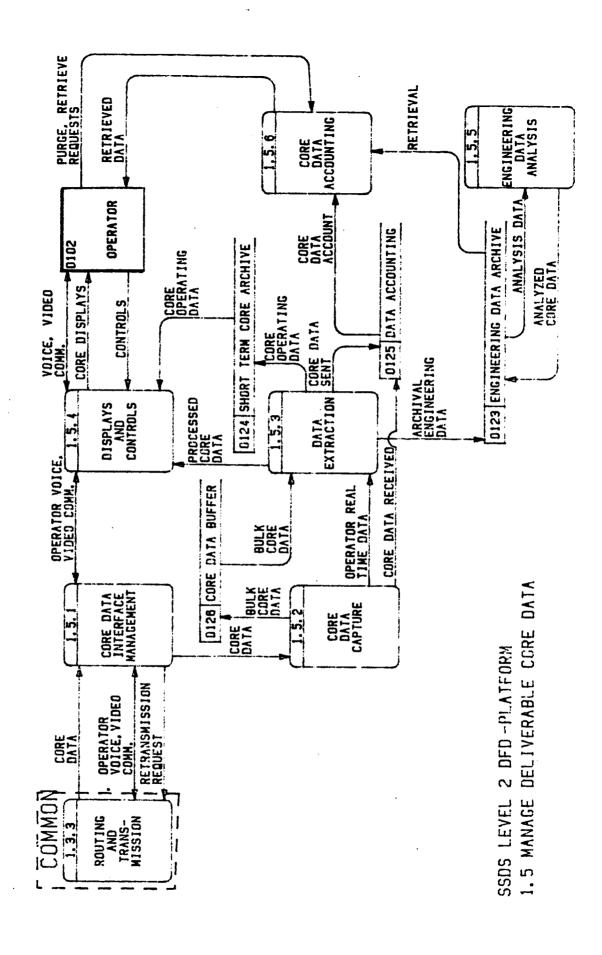


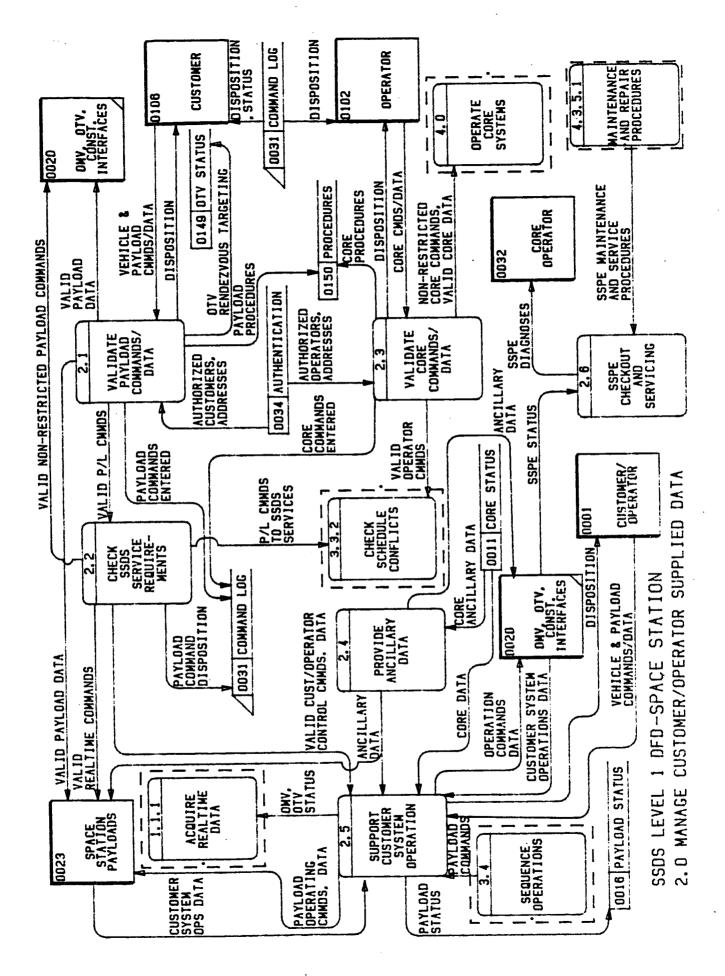
SSDS LEVEL 2 DFD -PLATFORM
1.2 MANAGE DELAYED DATA RETURN

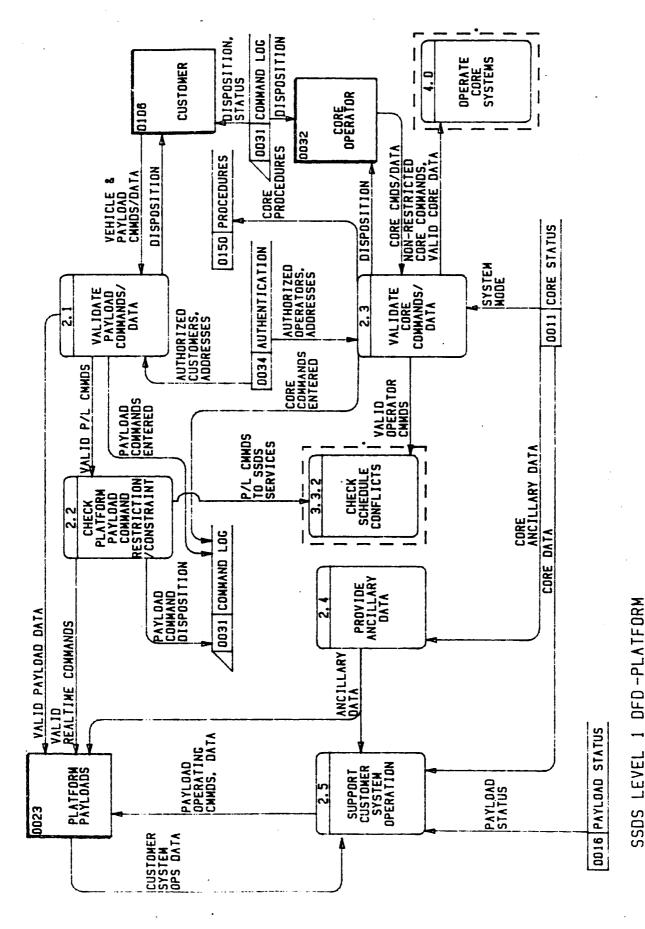




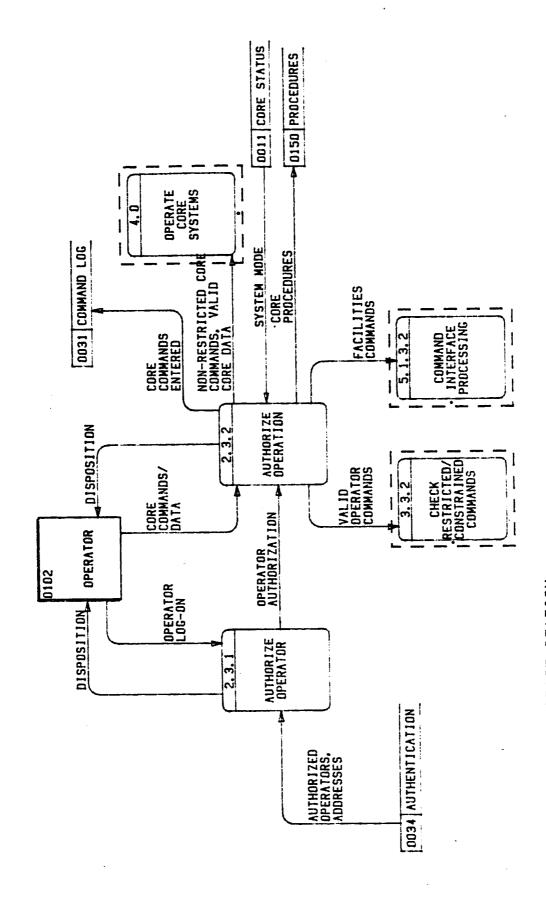




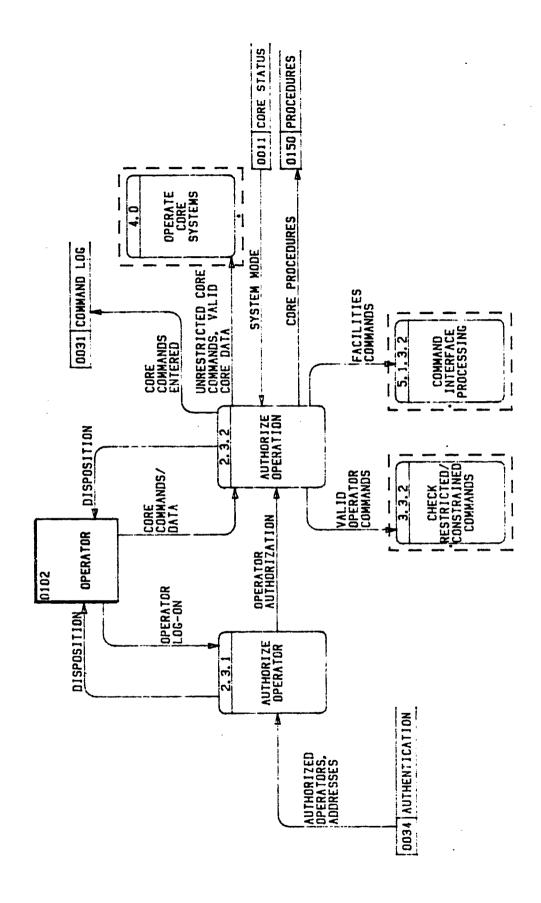




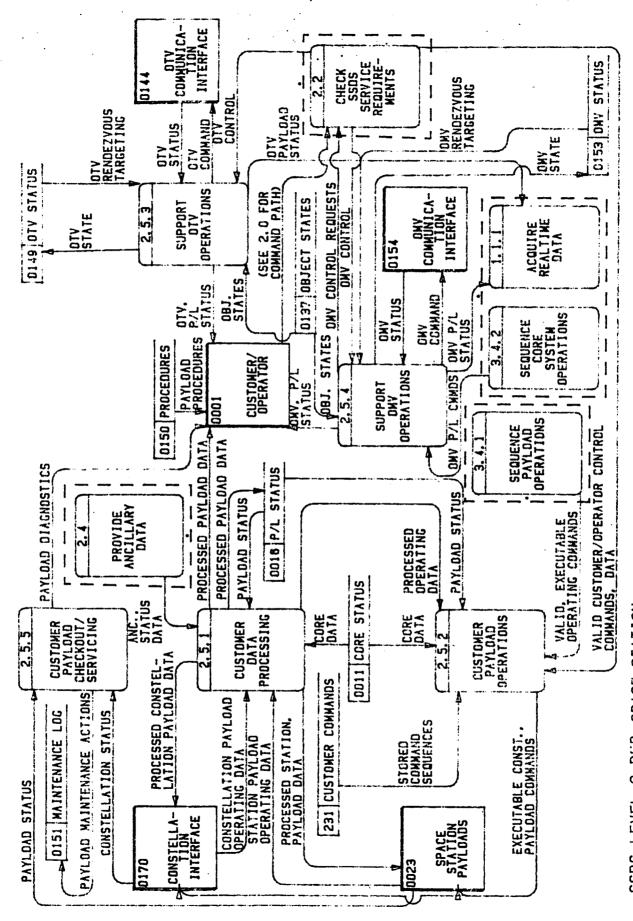
2.0 MANAGE CUSTOMER/OPERATOR SUPPLIED DATA



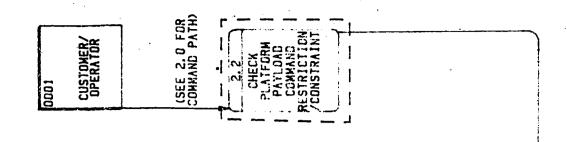
SSDS LEVEL 2 DFD-SPACE STATION 2.3 VALIDATE CORE COMMANDS/DATA



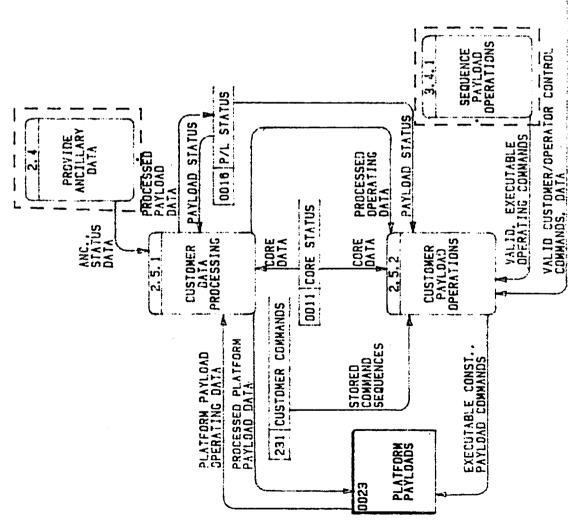
SSDS LEVEL 2 DFD-PLATFORM 2.3 VALIDATE CORE COMMANDS/DATA



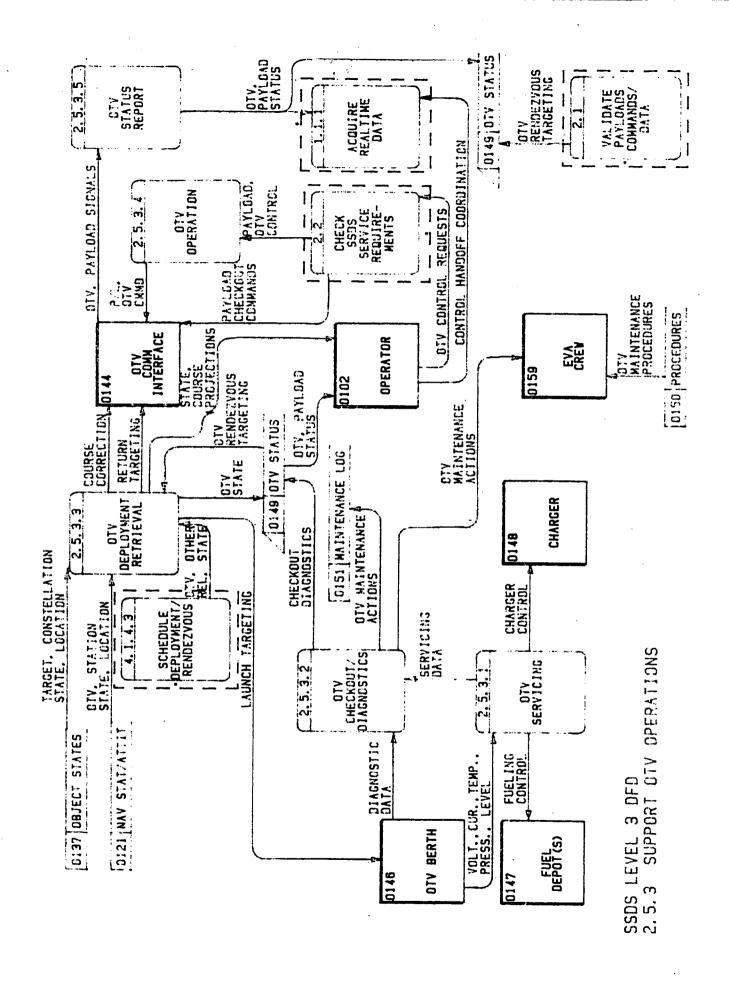
SSDS LEVEL 2 DFD -SPACE STATION 2.5 SUPPORT CUSTOMER SYSTEM OPERATION

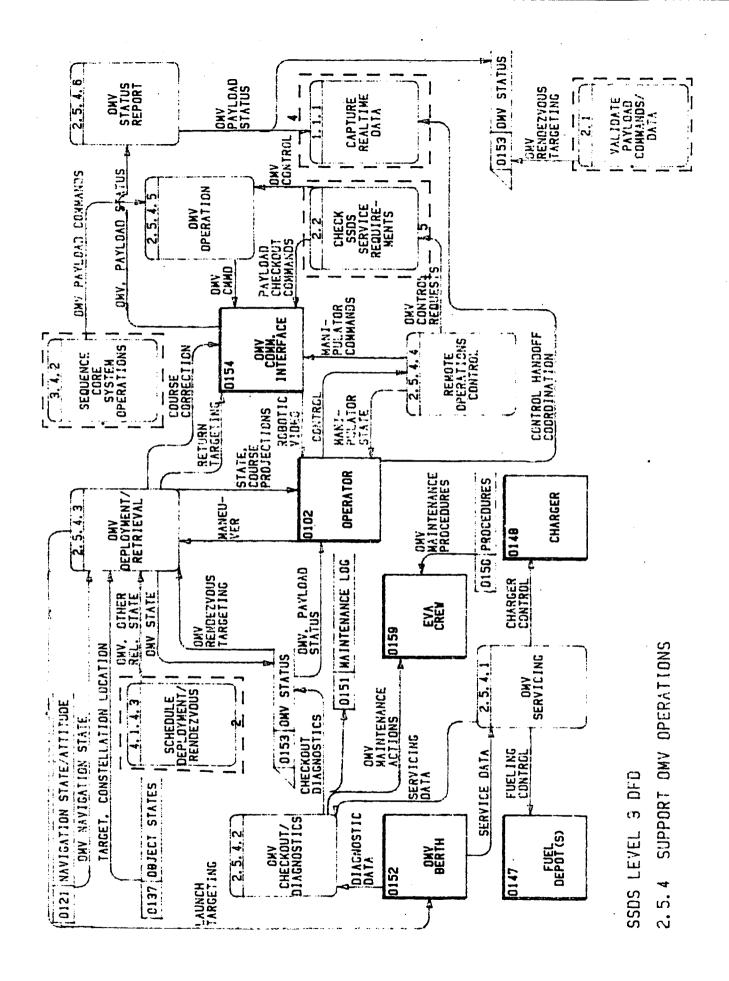


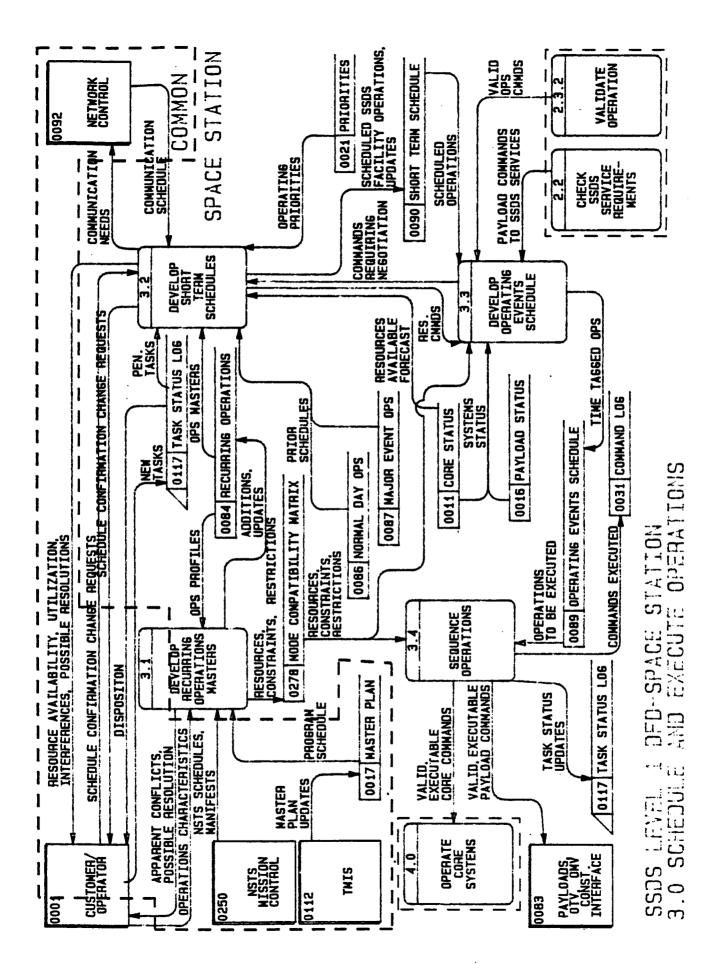
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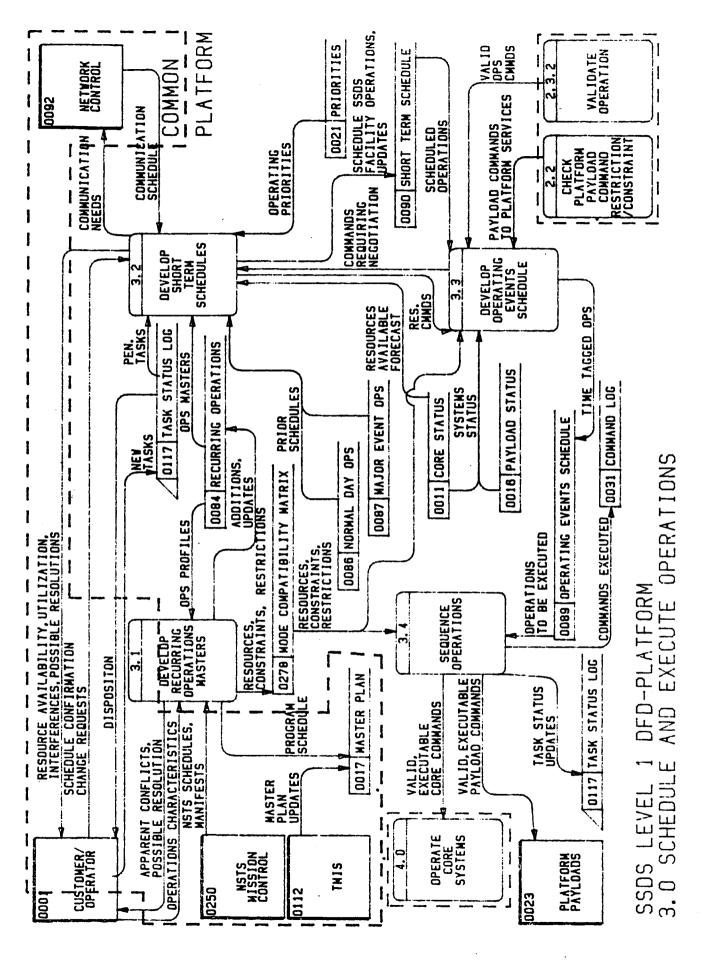


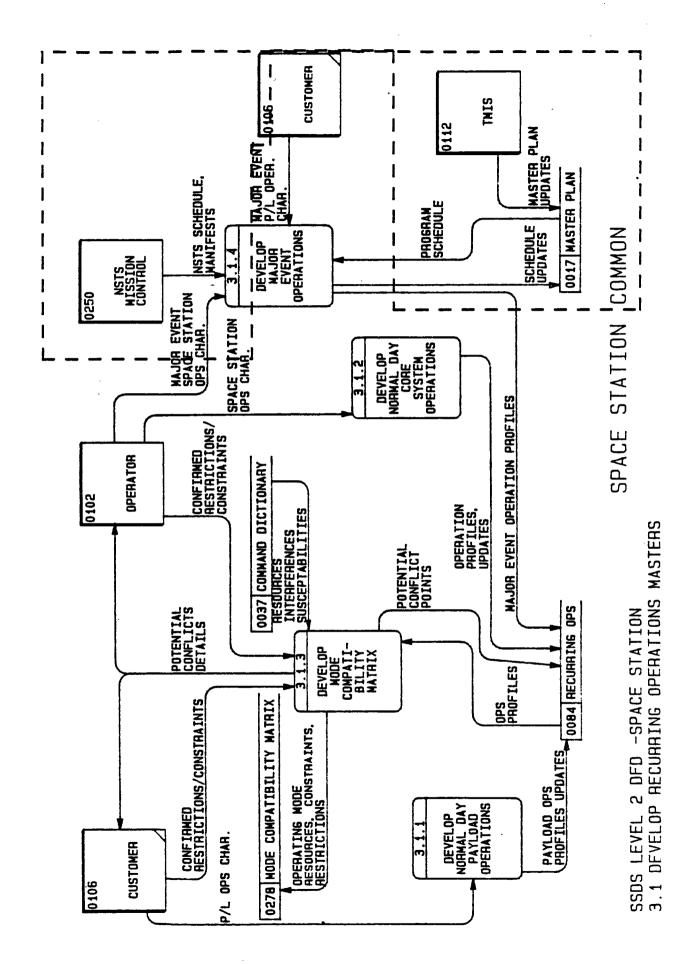
SSDS LEVEL 2 DFD-PLATFORM 2.5 SUPPORT CUSTOMER SYSTEM OPERATION



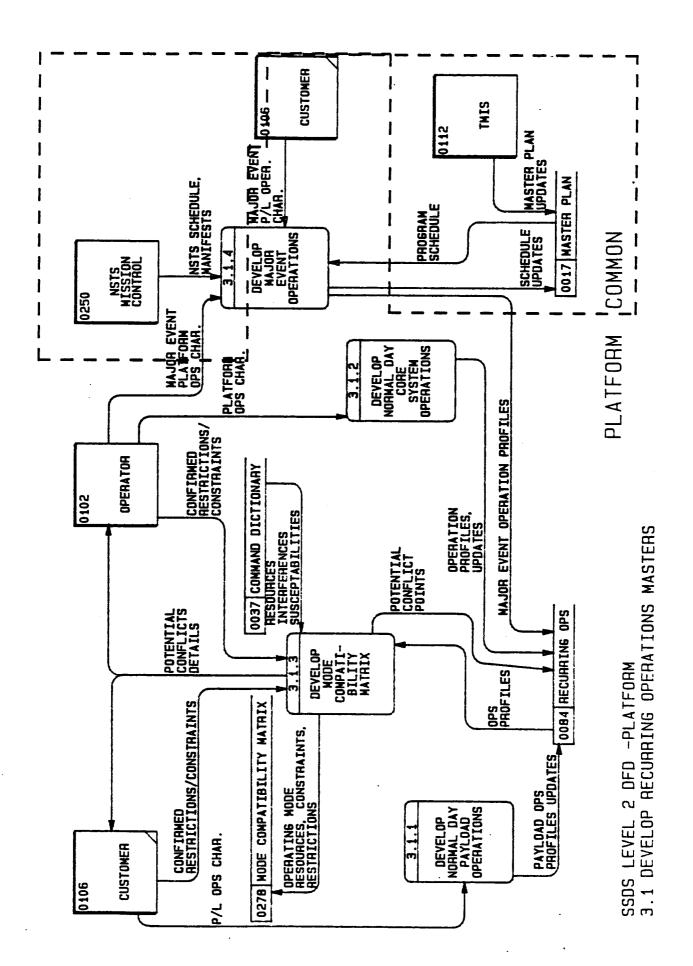


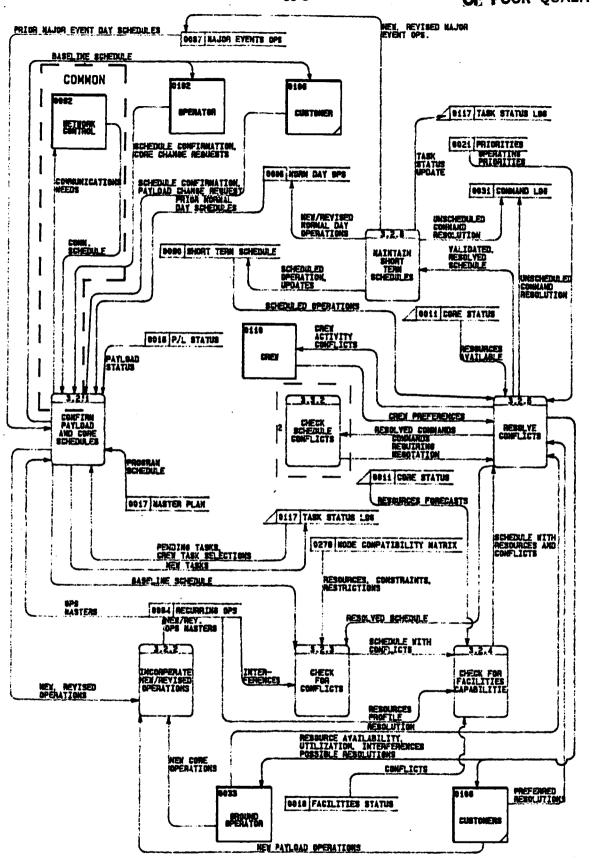






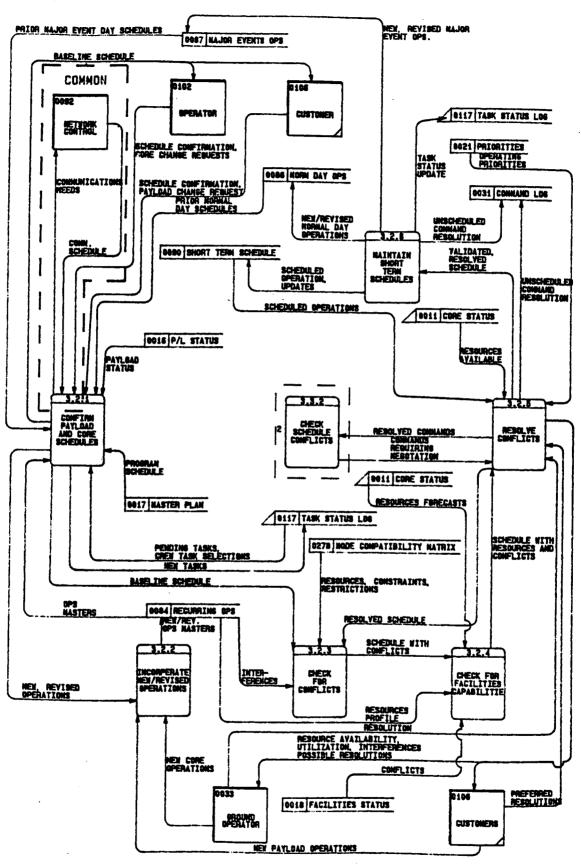
D-26



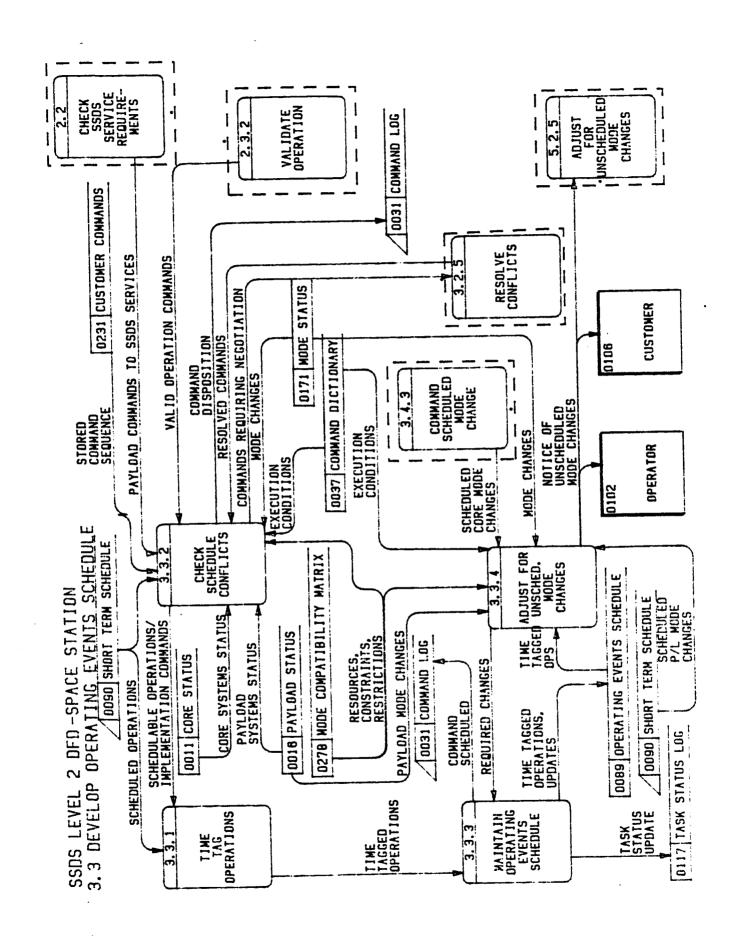


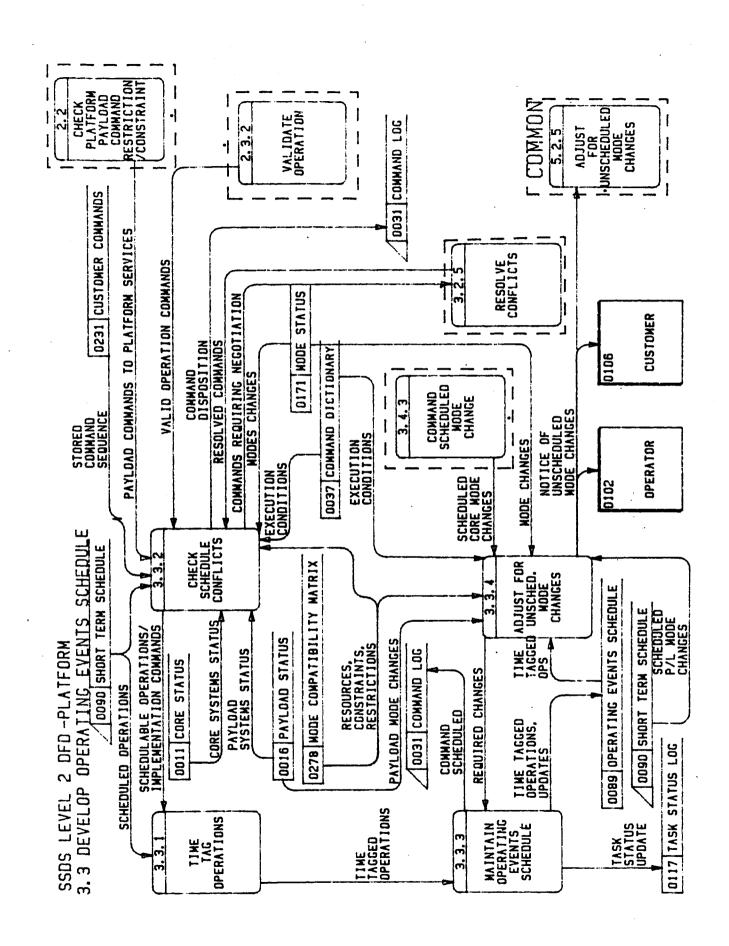
SSDS LEVEL 2-SPACE STATION
3.2 DEVELOP SHORT TERM SCHEDULES

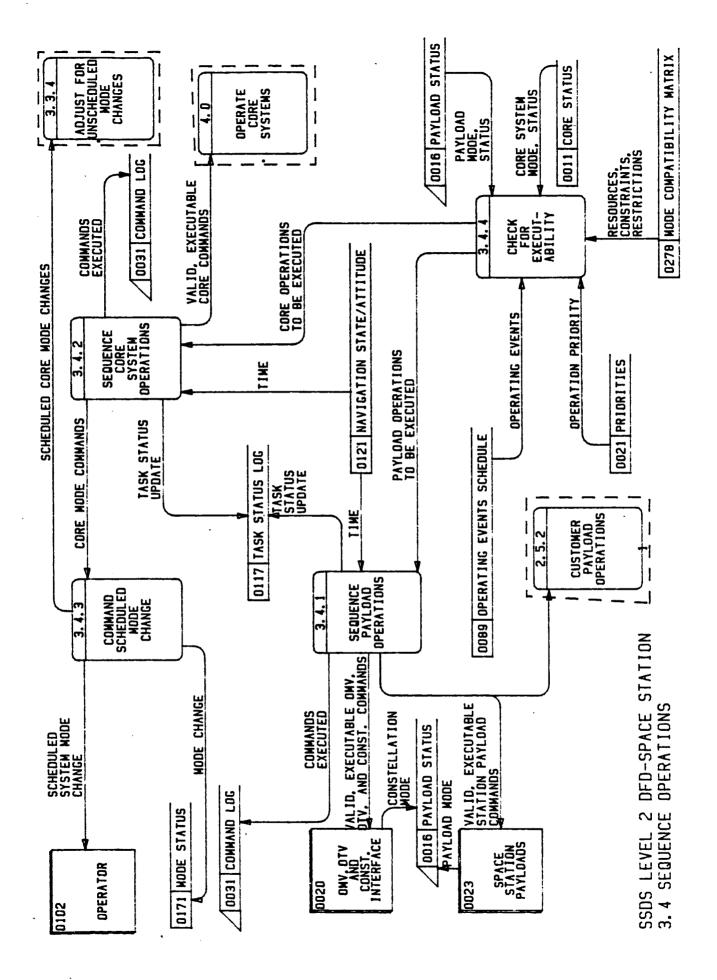
STAR JANIBIRO TITANO ROCE TO

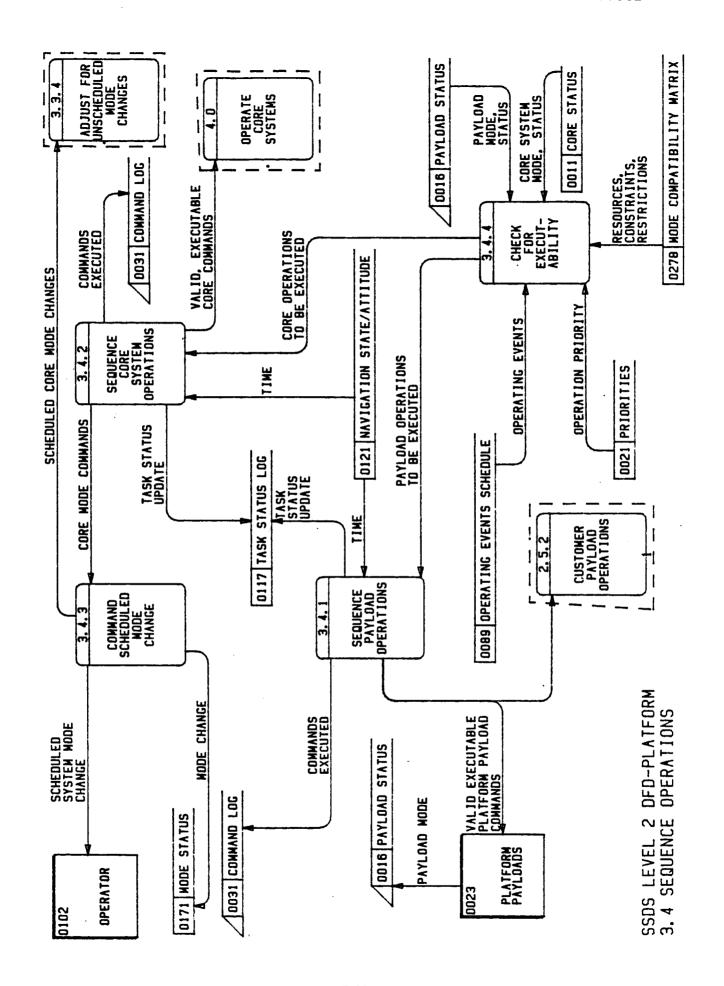


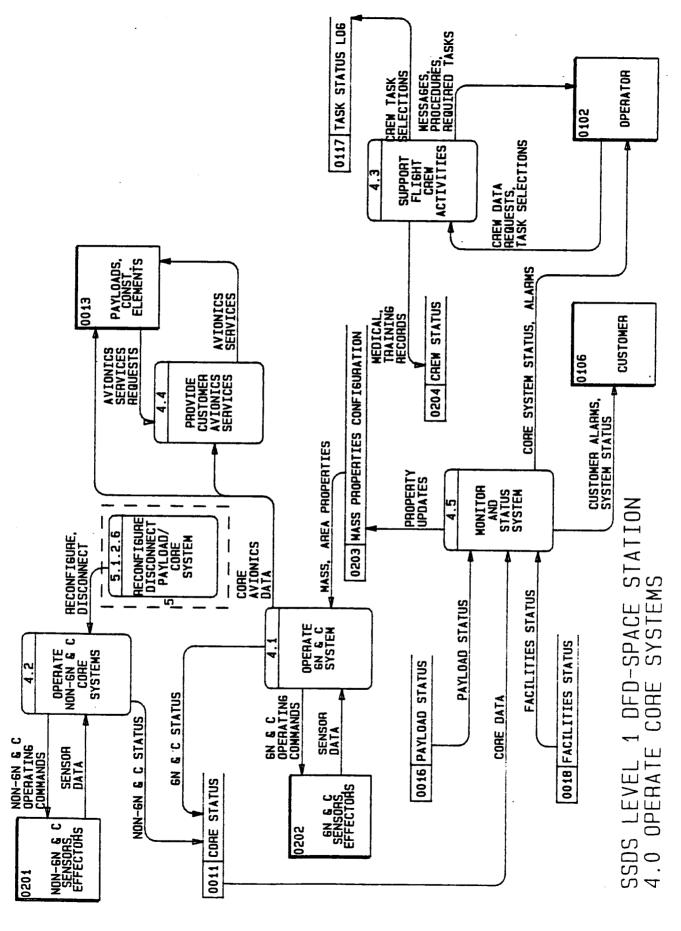
SSDS LEVEL 2-PLATFORM
3.2 DEVELOP SHORT TERM SCHEDULES

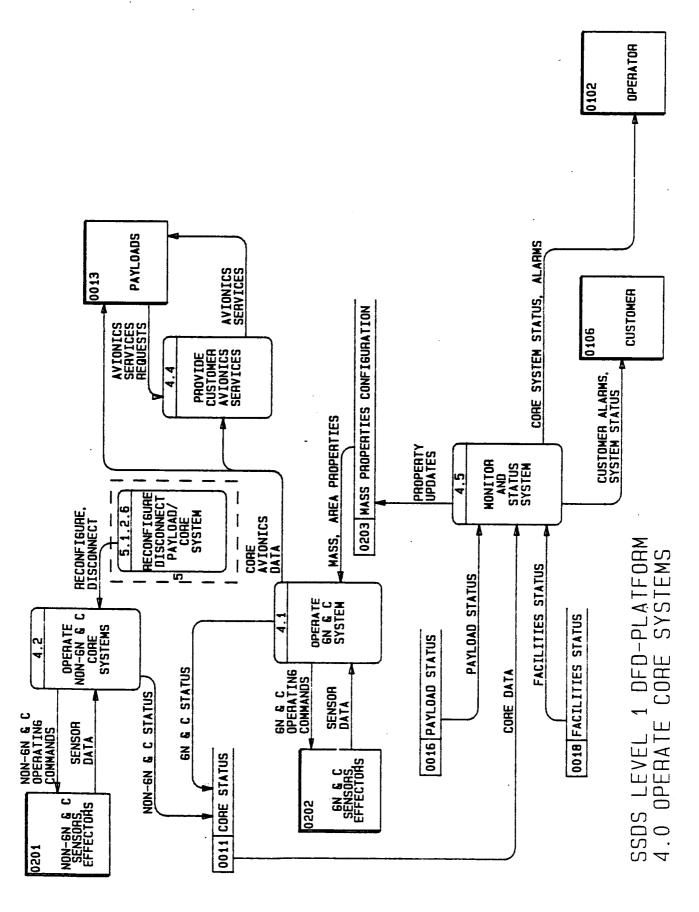


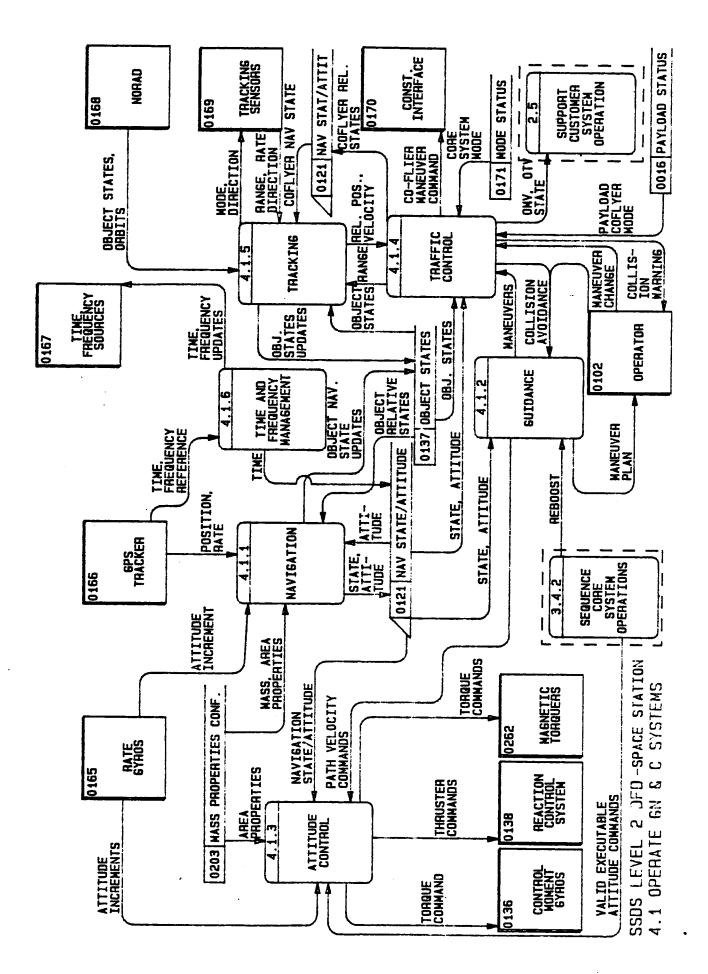


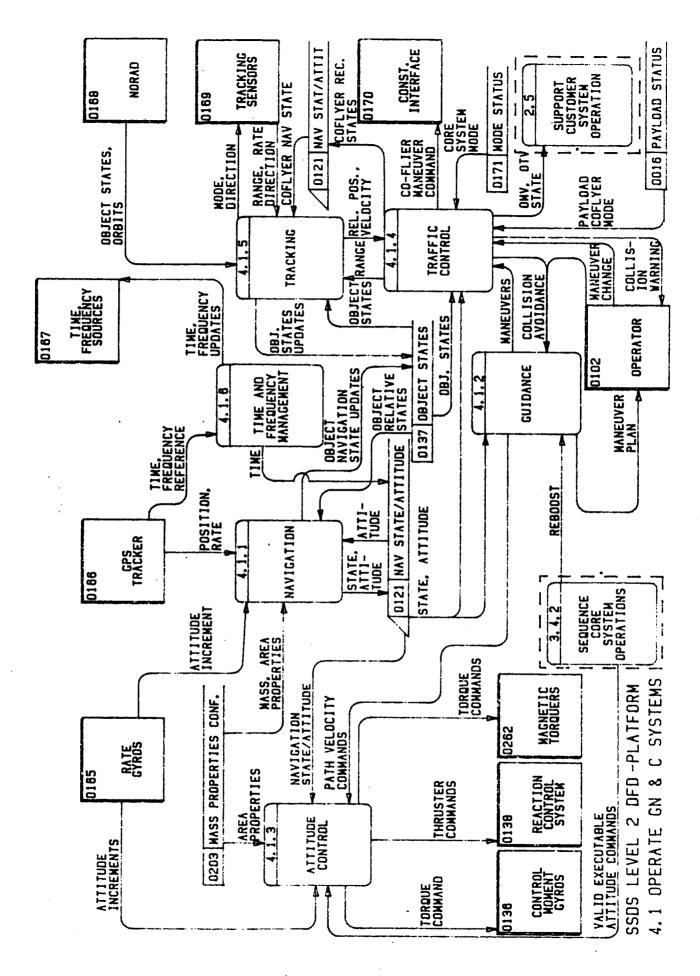


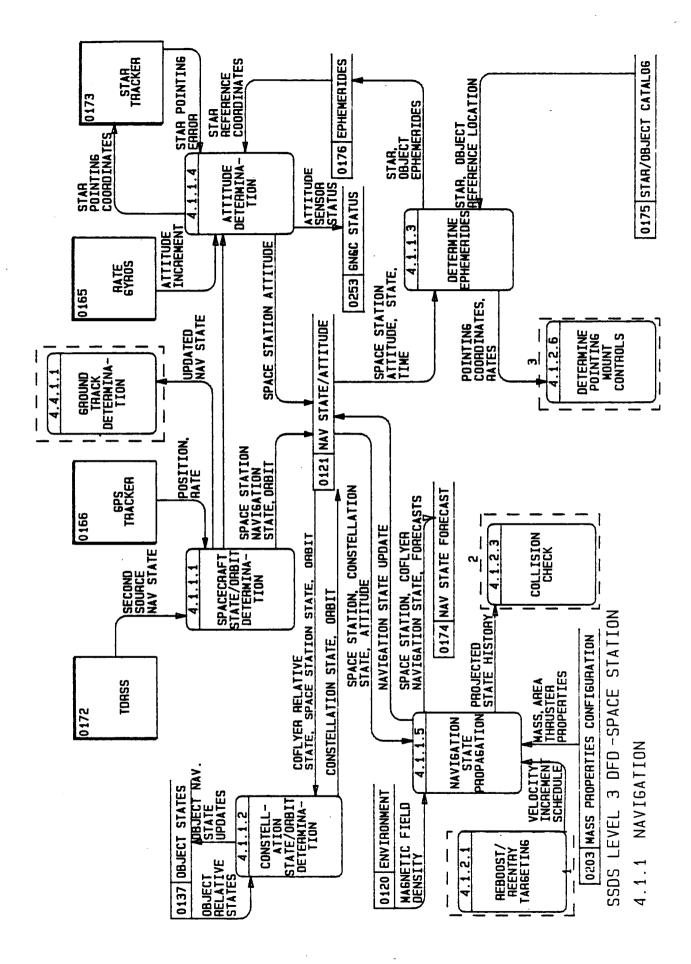


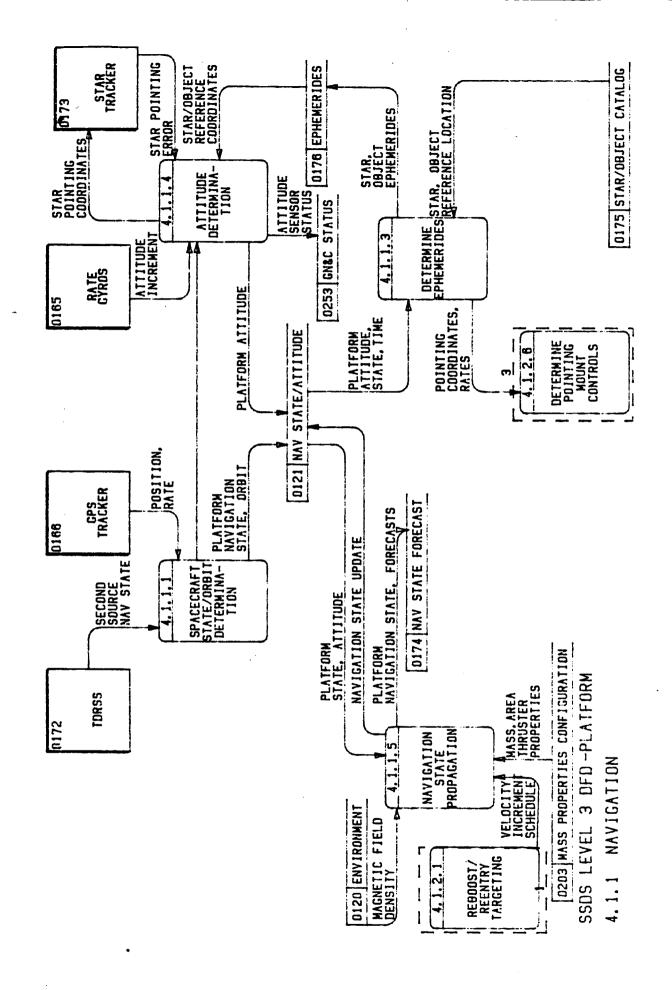


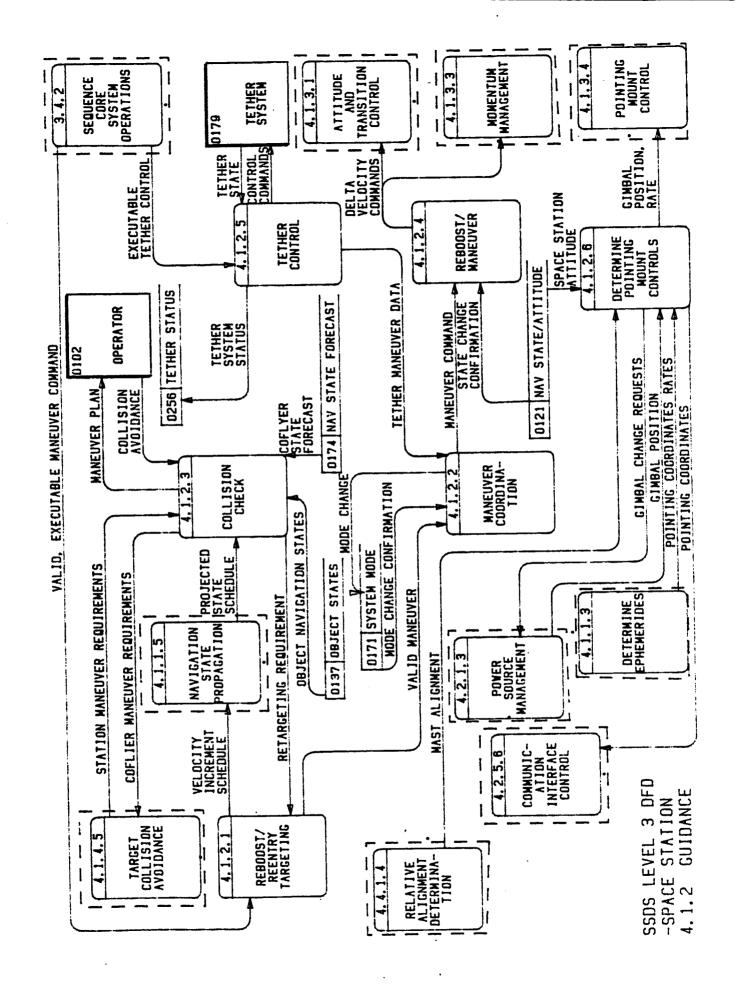


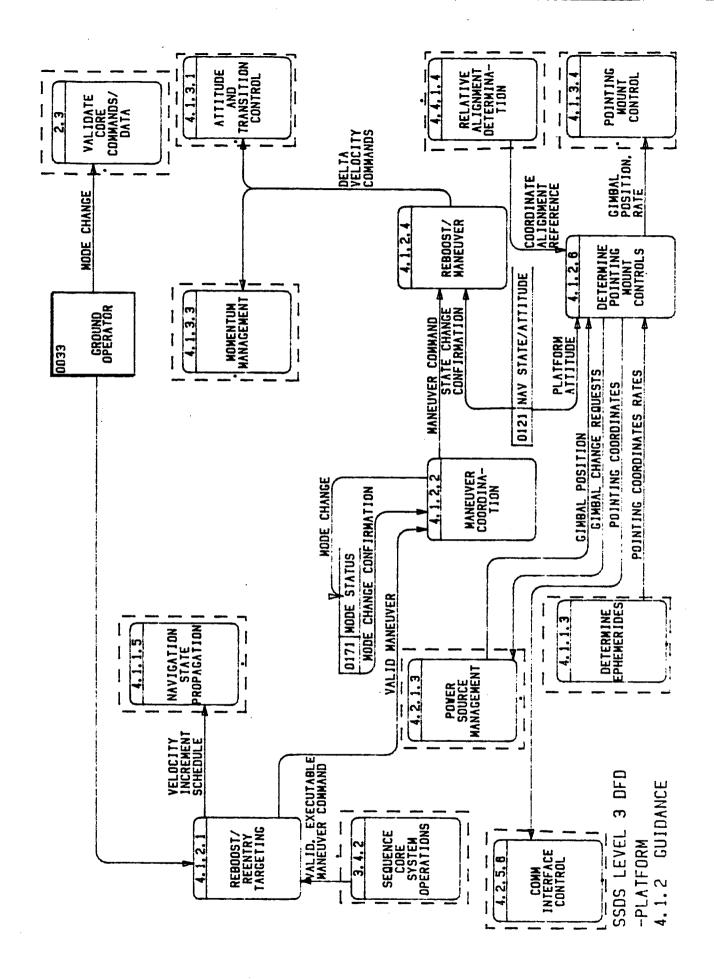


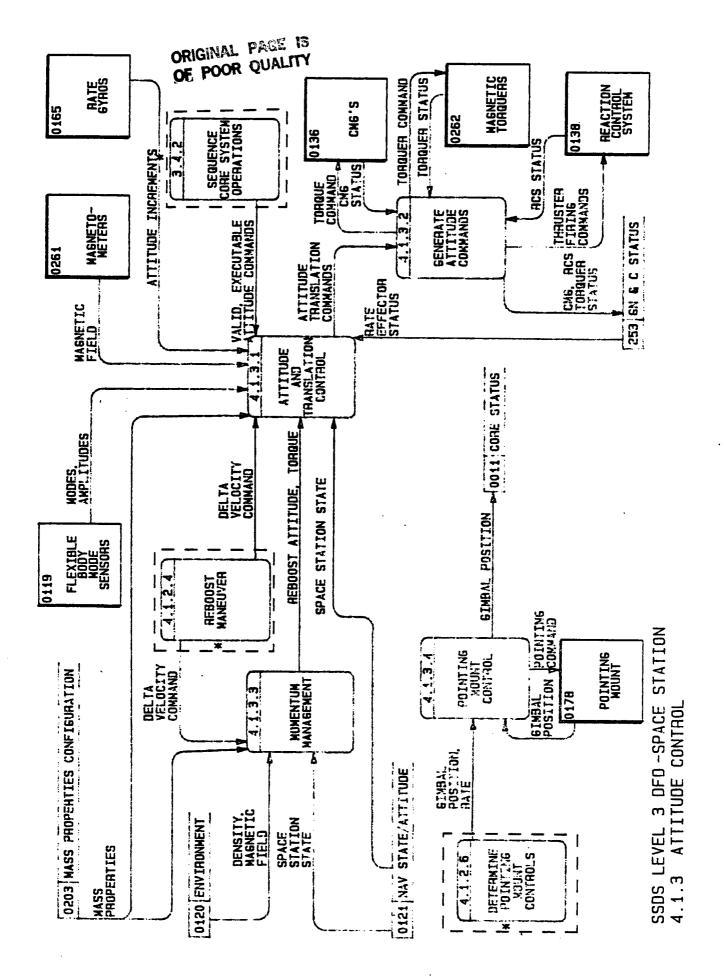


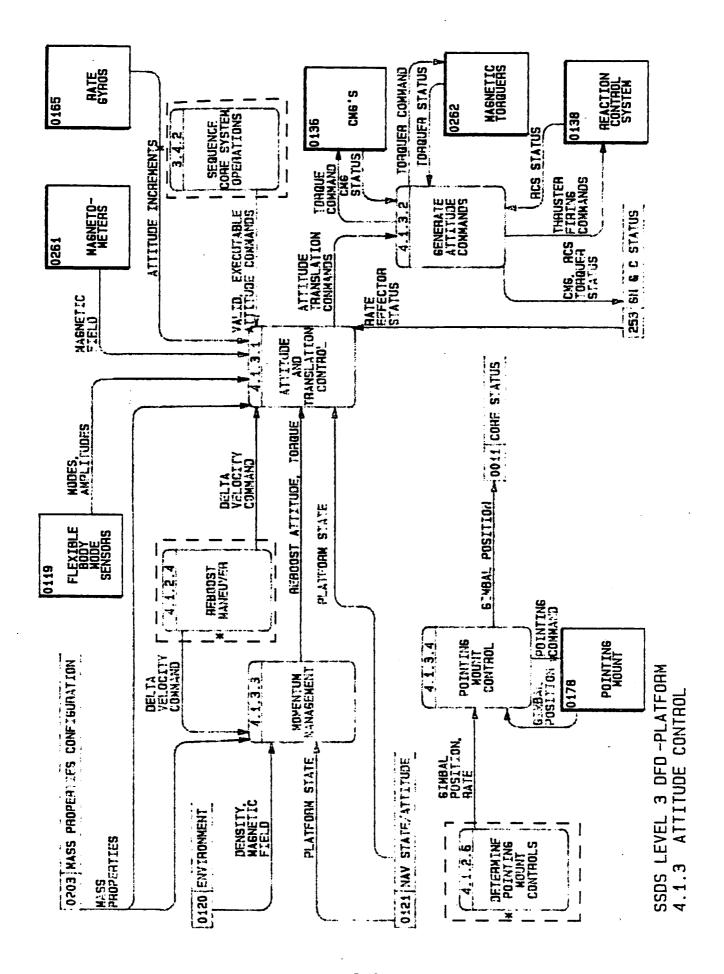


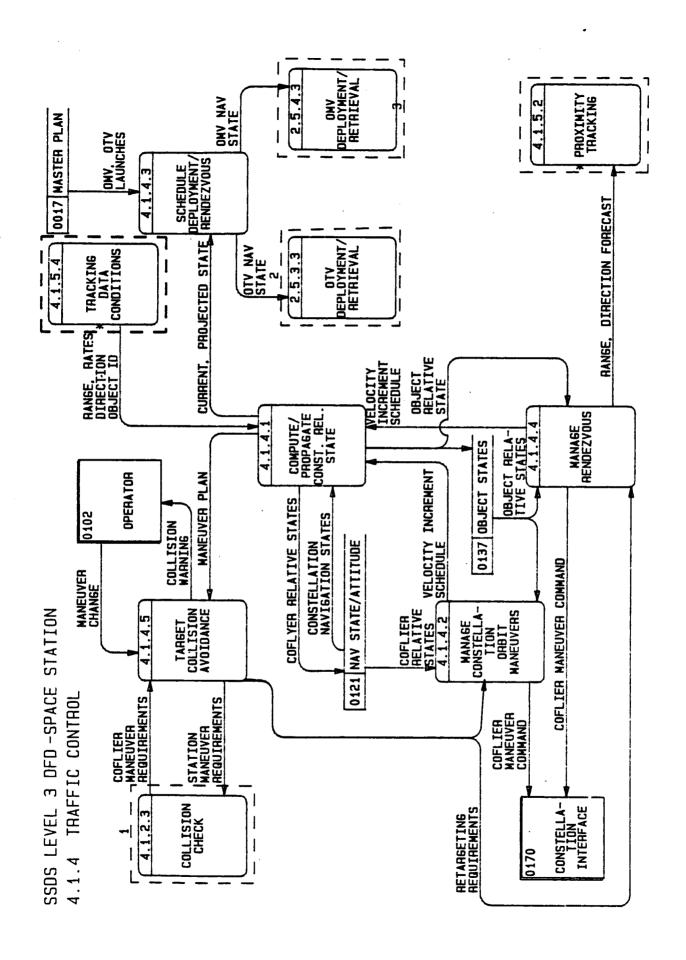


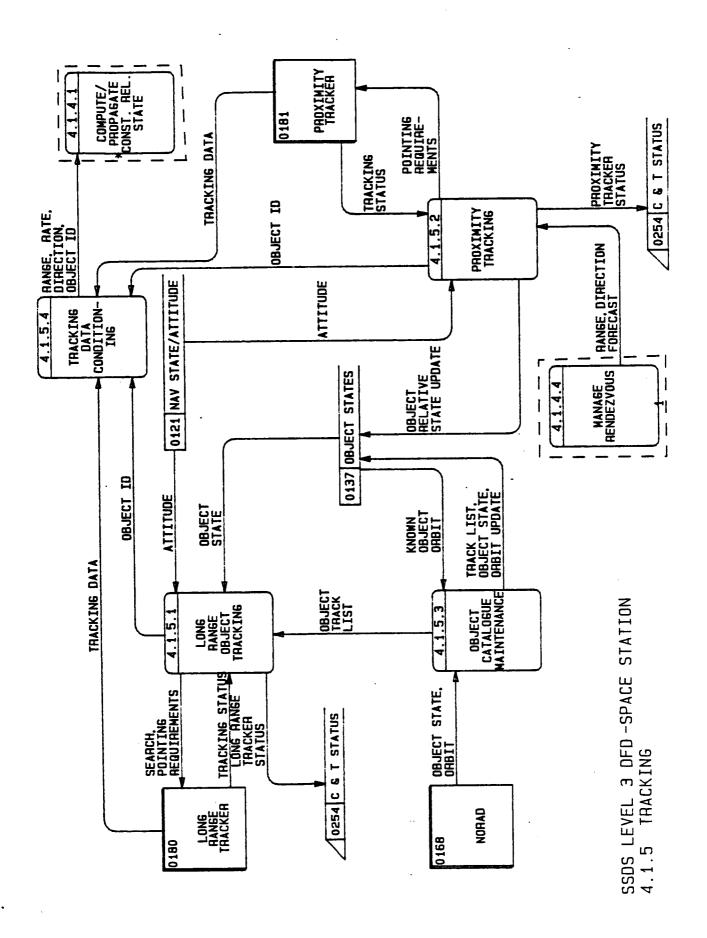


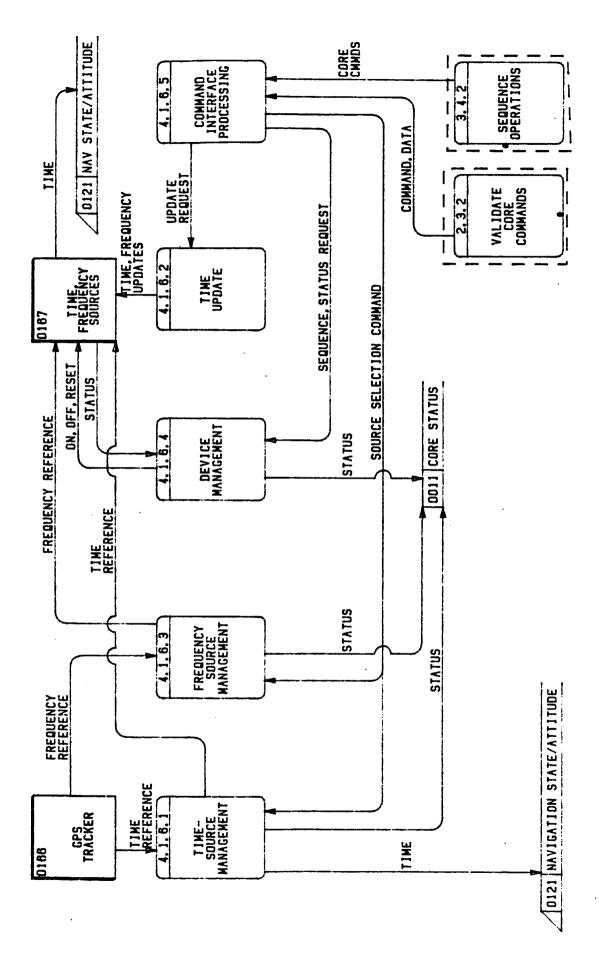




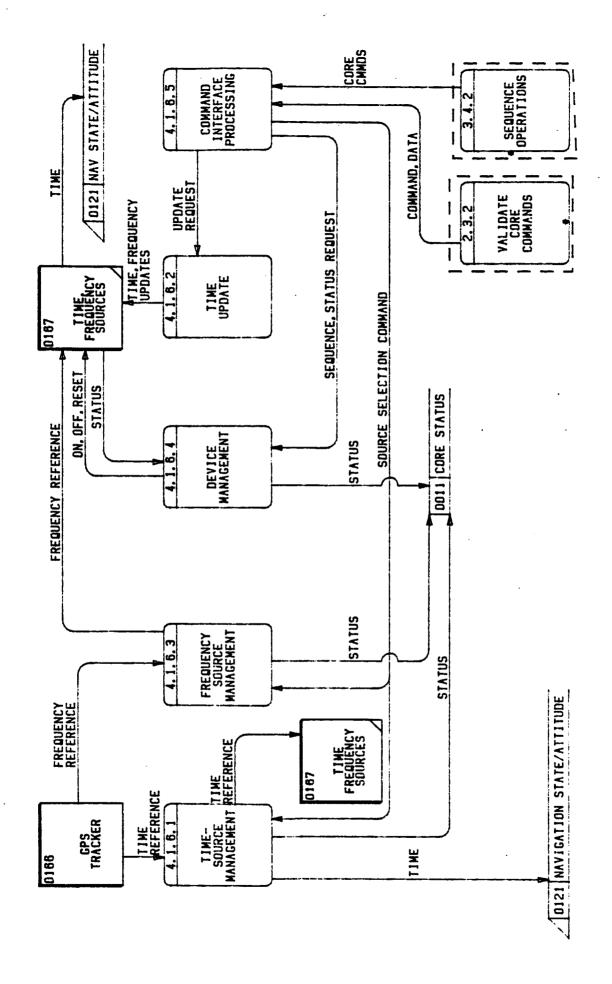




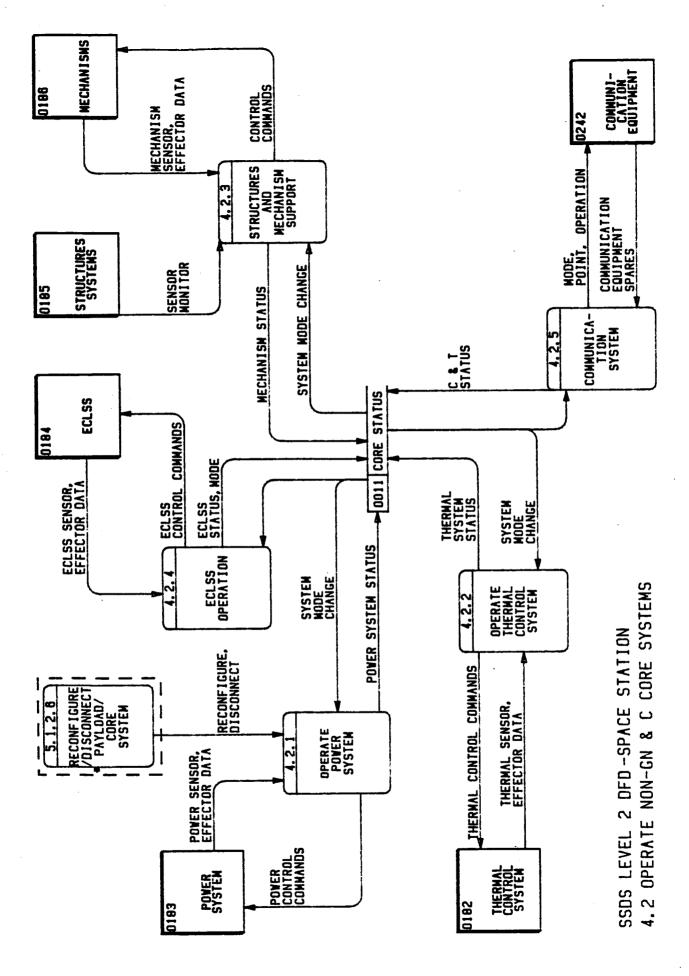


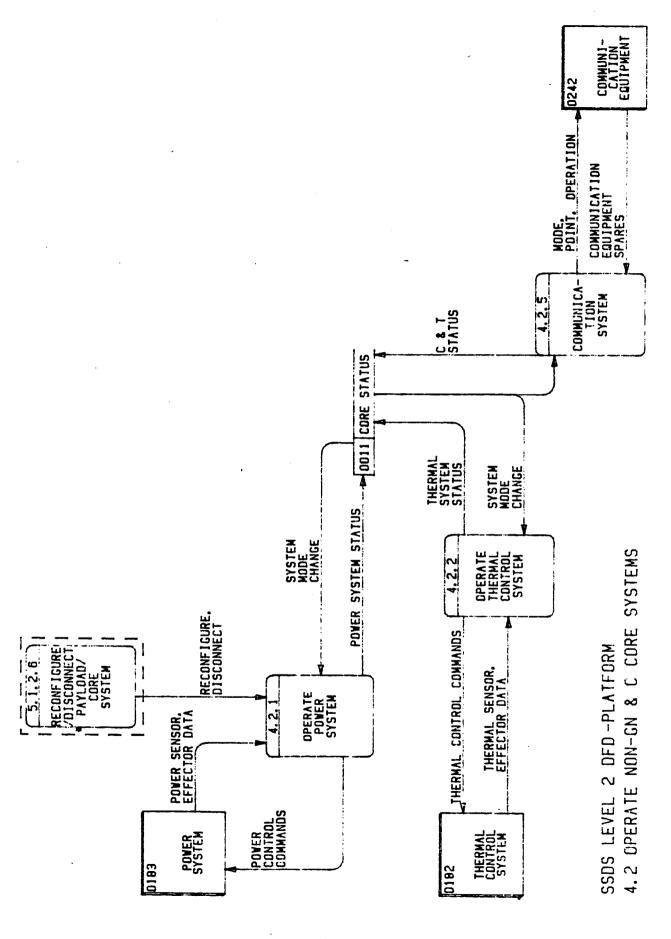


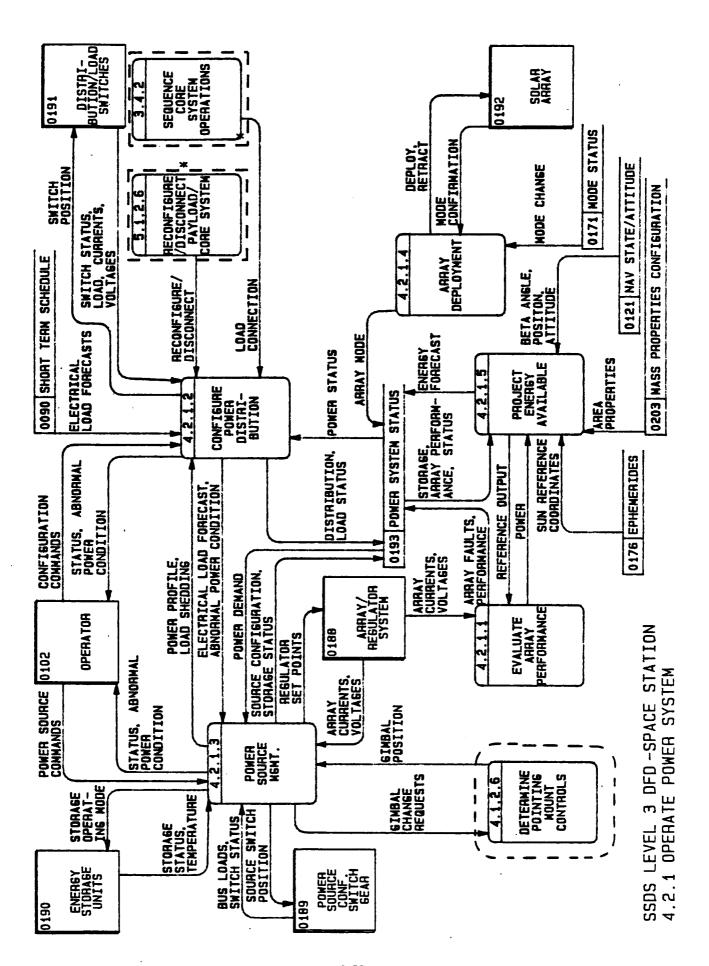
SSDS LEVEL 3 DED-SPACE STATION
4.1.6 TIME AND FREQUENCY MANAGEMENT

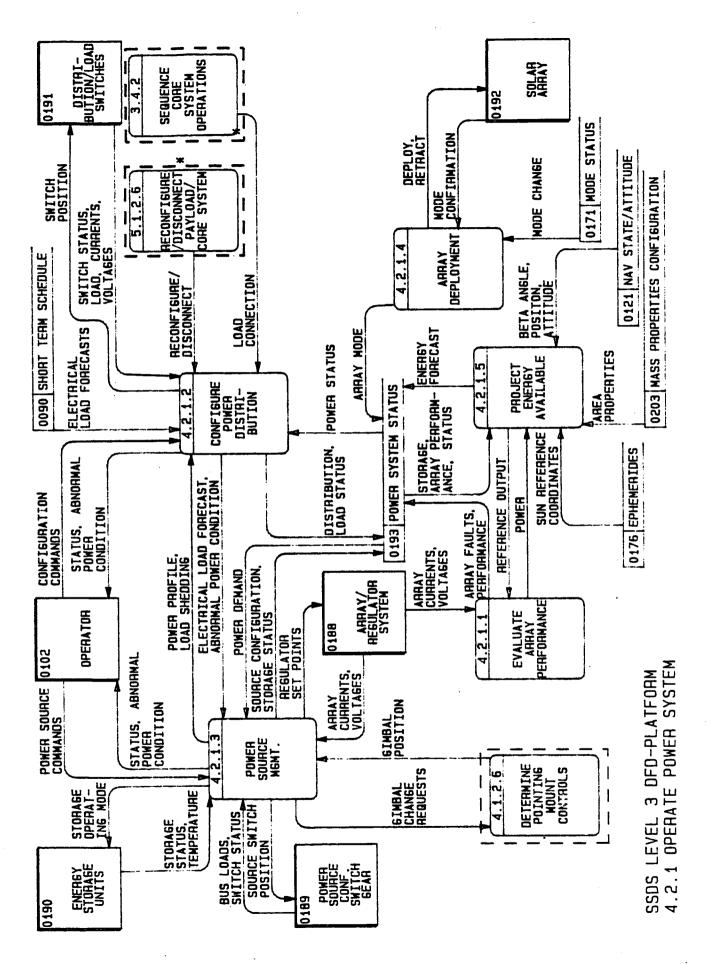


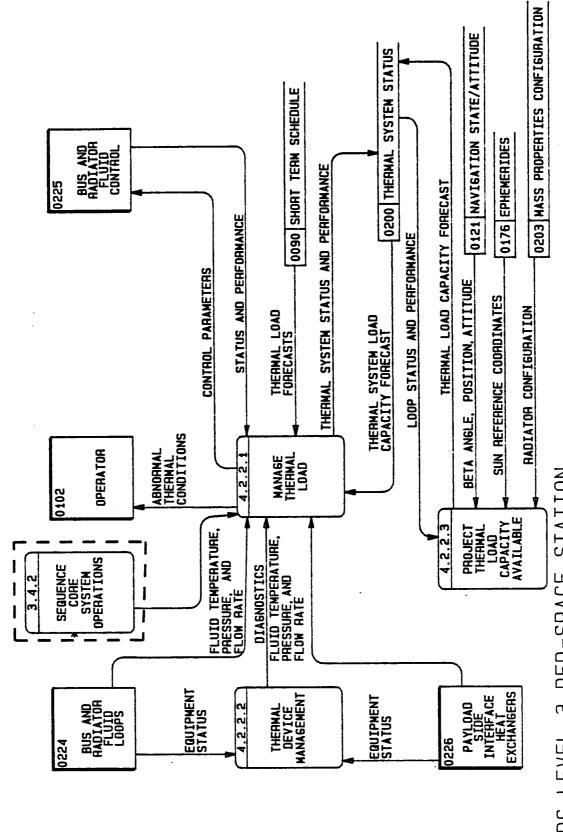
SSDS LEVEL 3 DFD-PLATFORM
4.1.6 TIME AND FREQUENCY MANAGEMENT



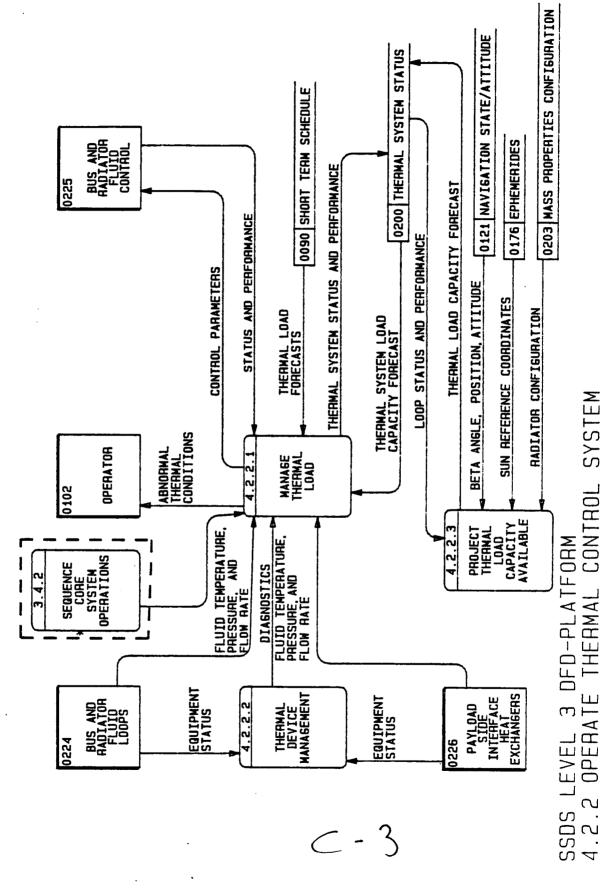








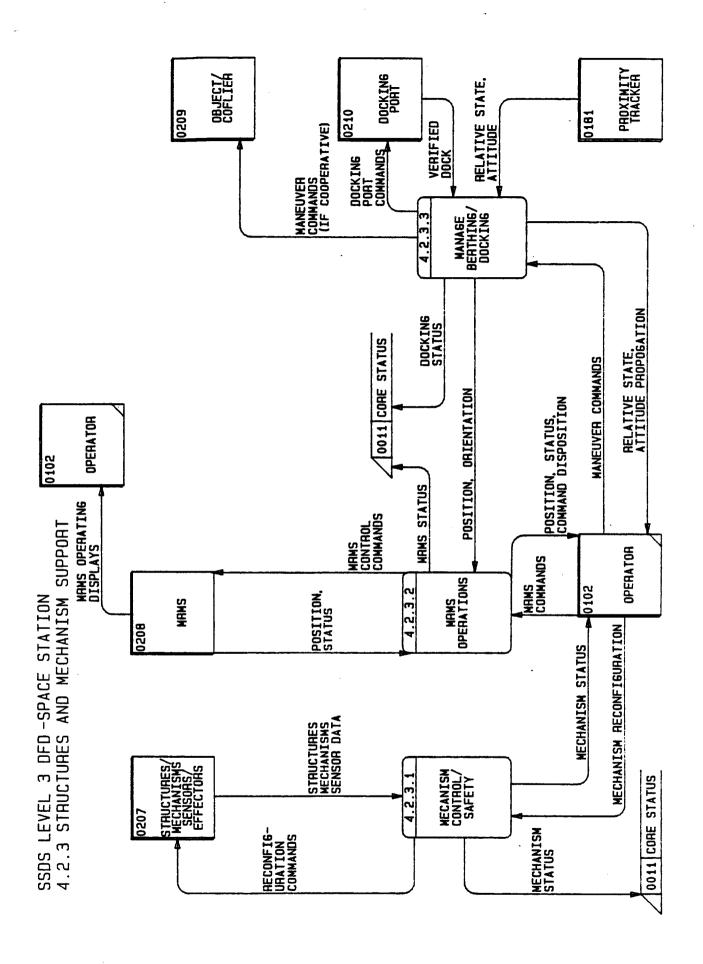
SSDS LEVEL 3 DFD-SPACE STATION 4.2.2 OPERATE THERMAL CONTROL SYSTEM

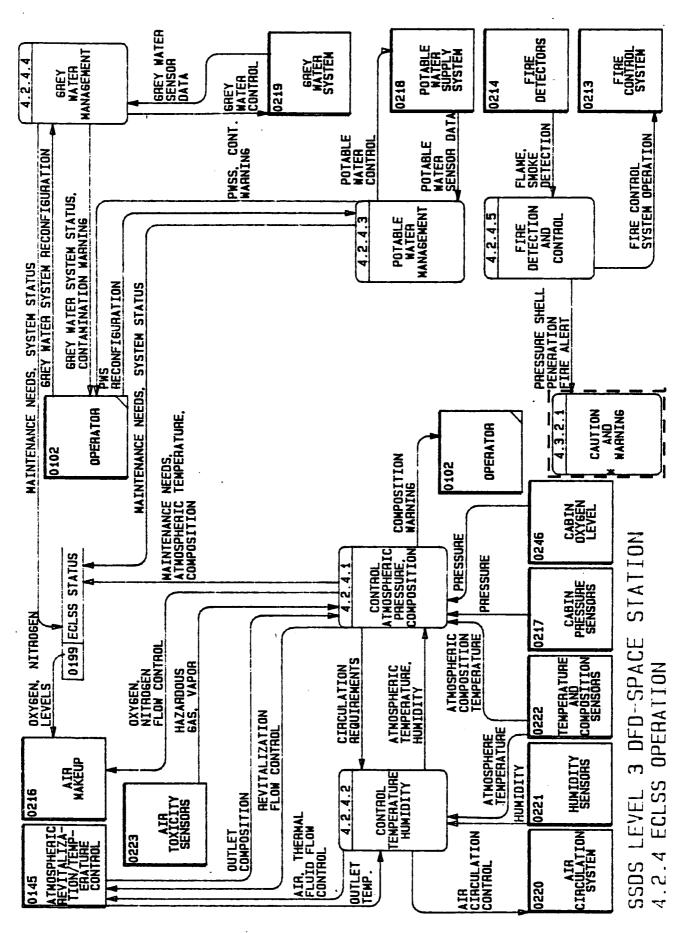


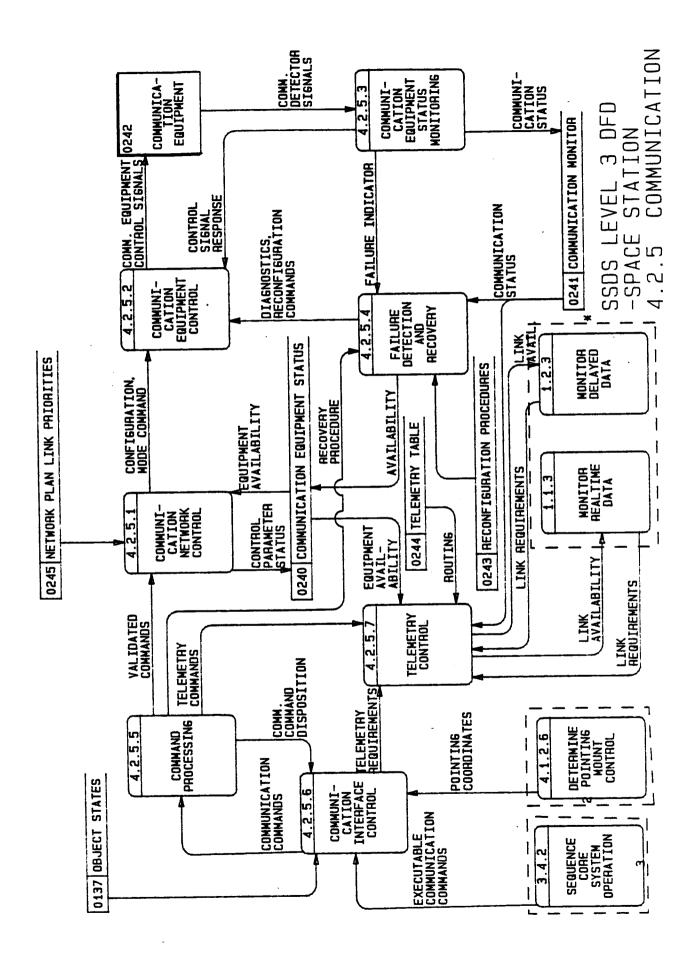
SYSTEM

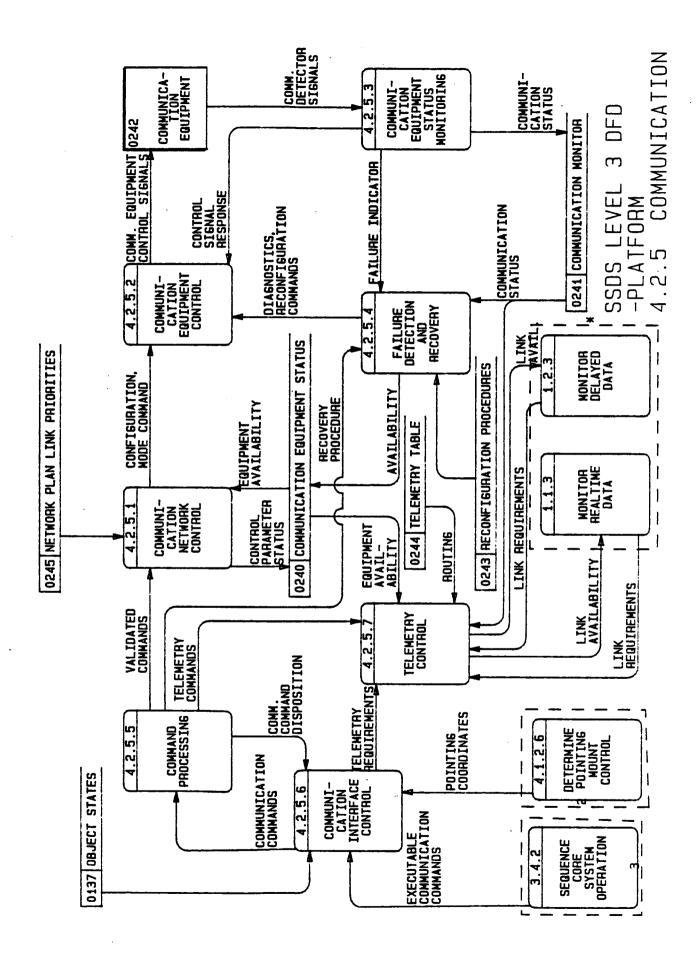
CONTROL

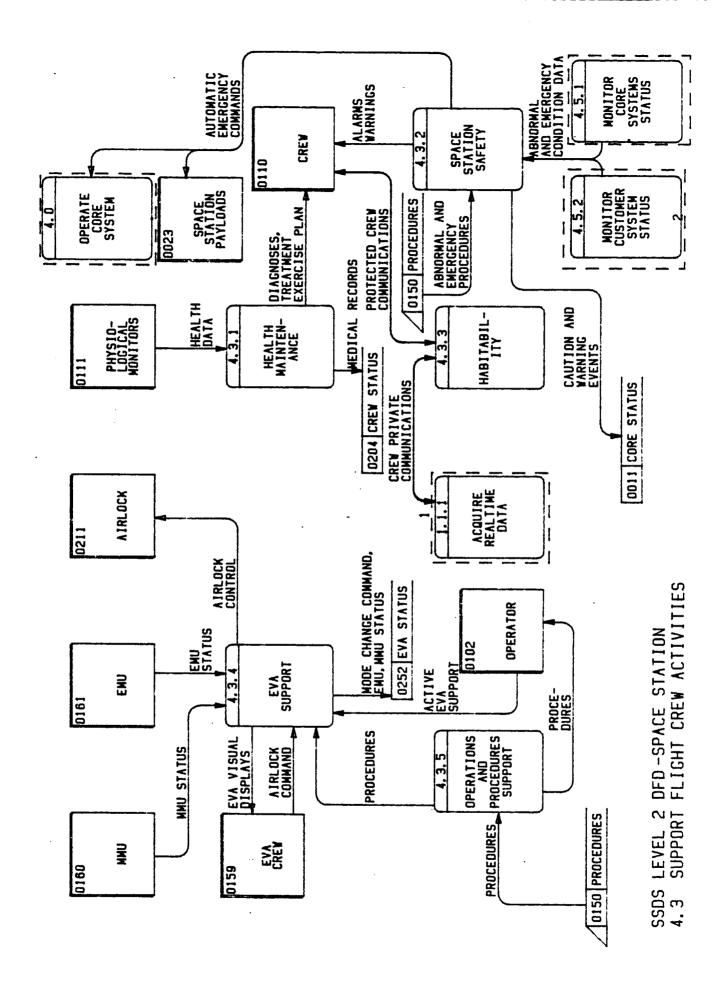
D-53

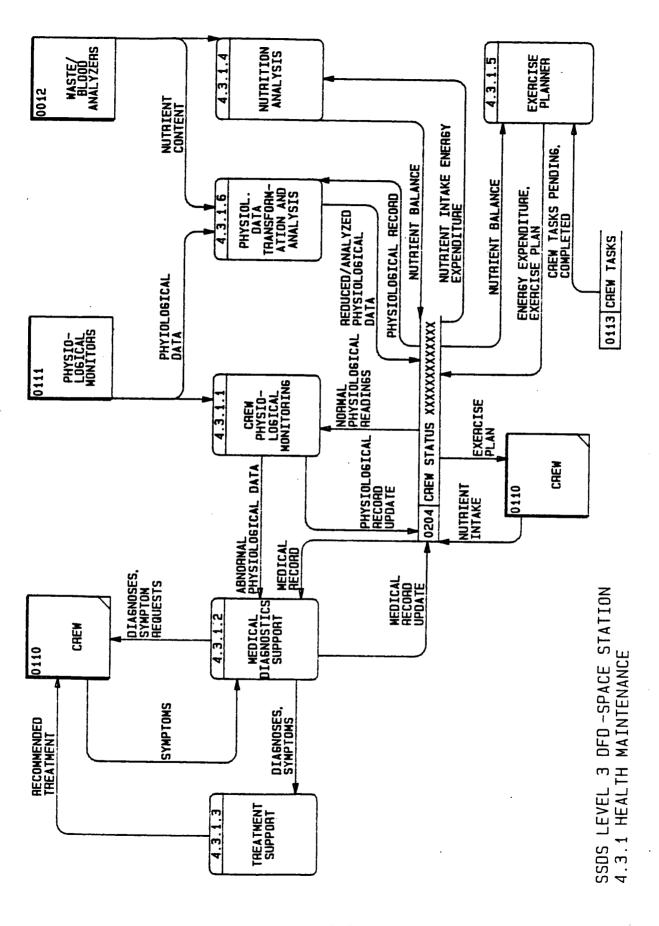


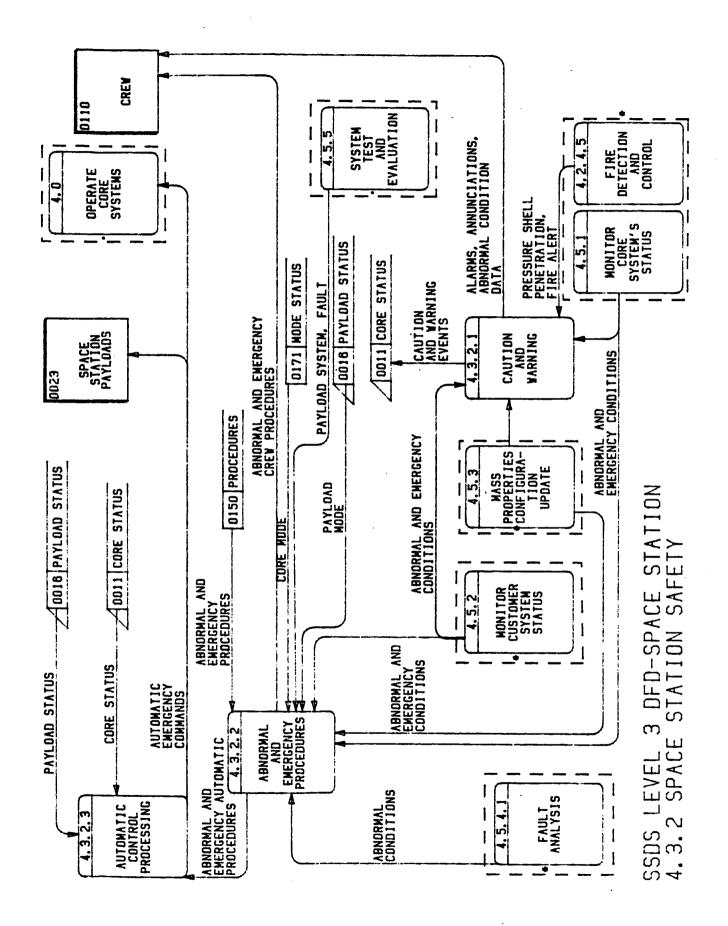


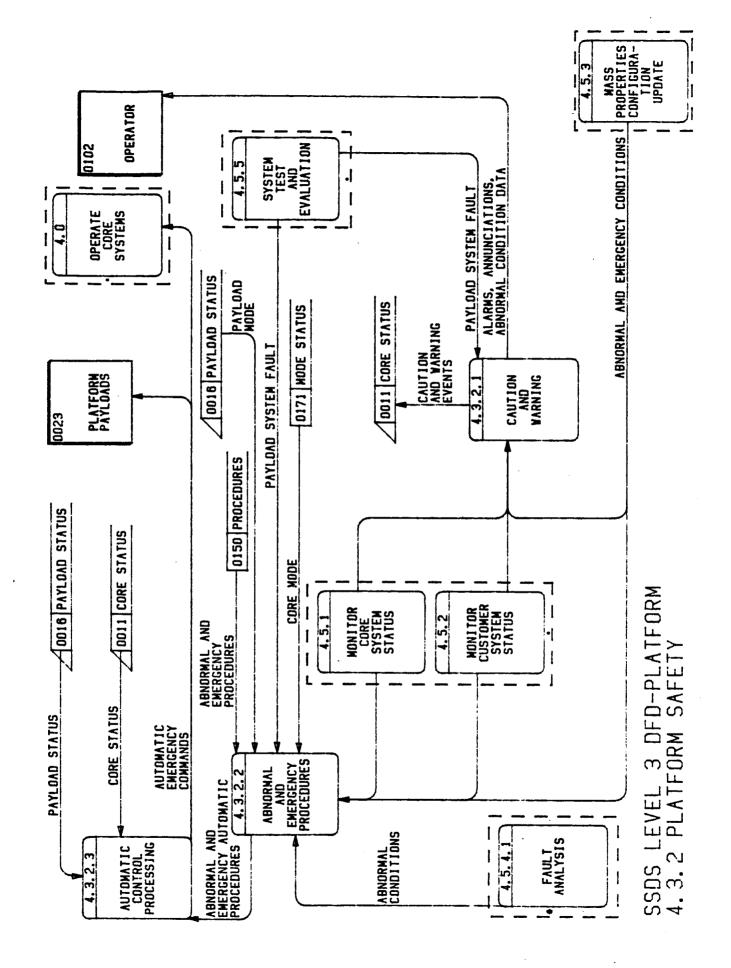


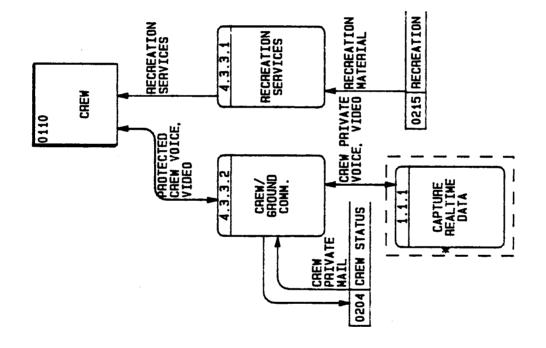




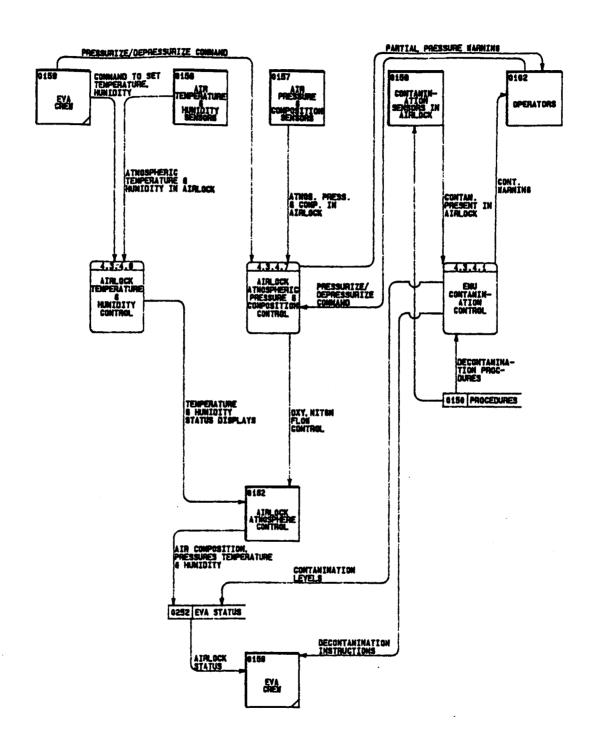




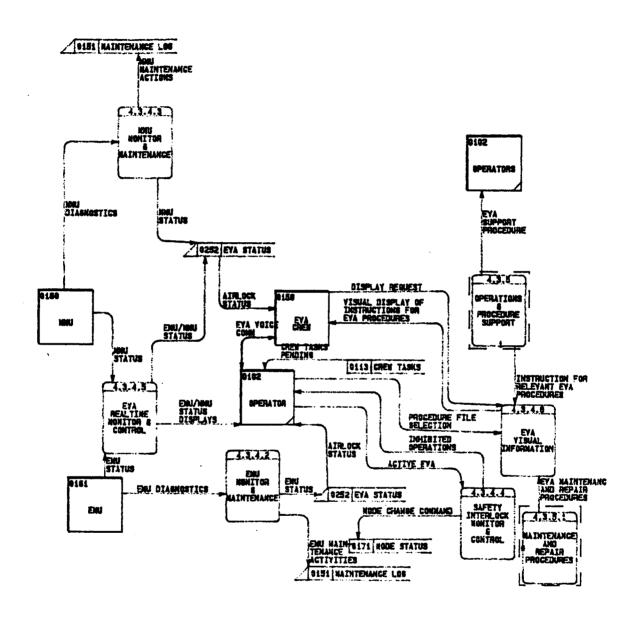




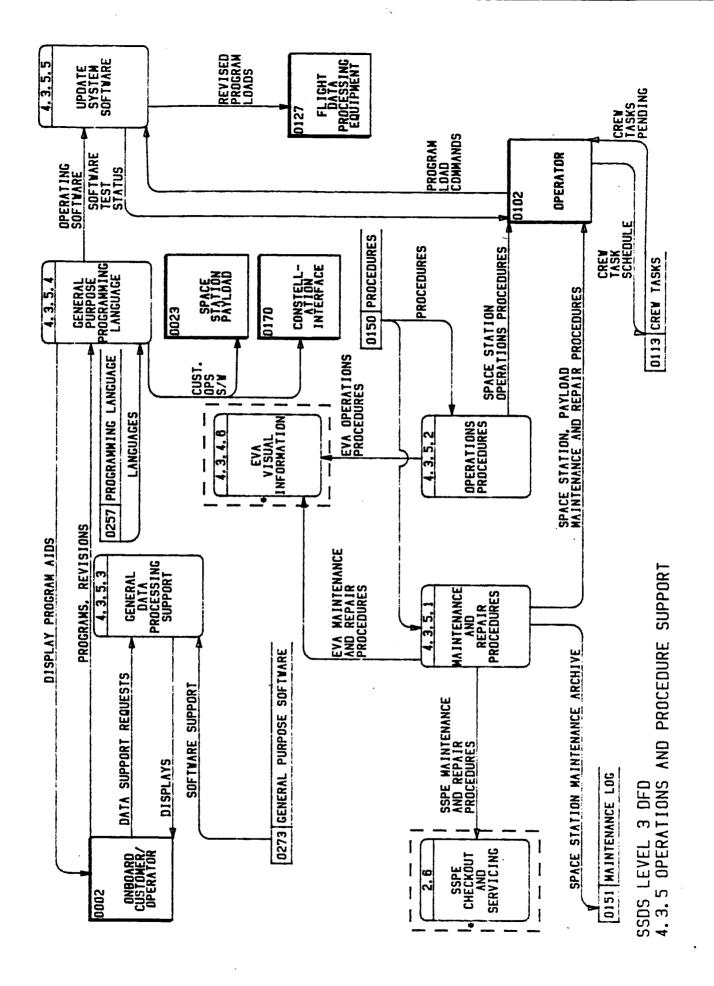
SSDS LEVEL 3 DFD -SPACE STATION 4.3.3 HABITABILITY

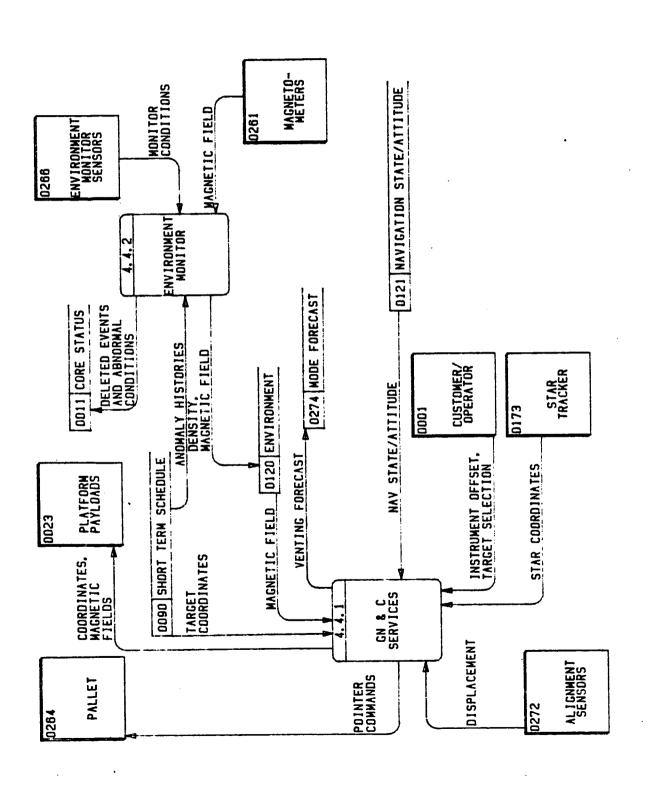


SSDS LEVEL 3 DFD-SPACE STATION 4.3.4 EVA SUPPORT

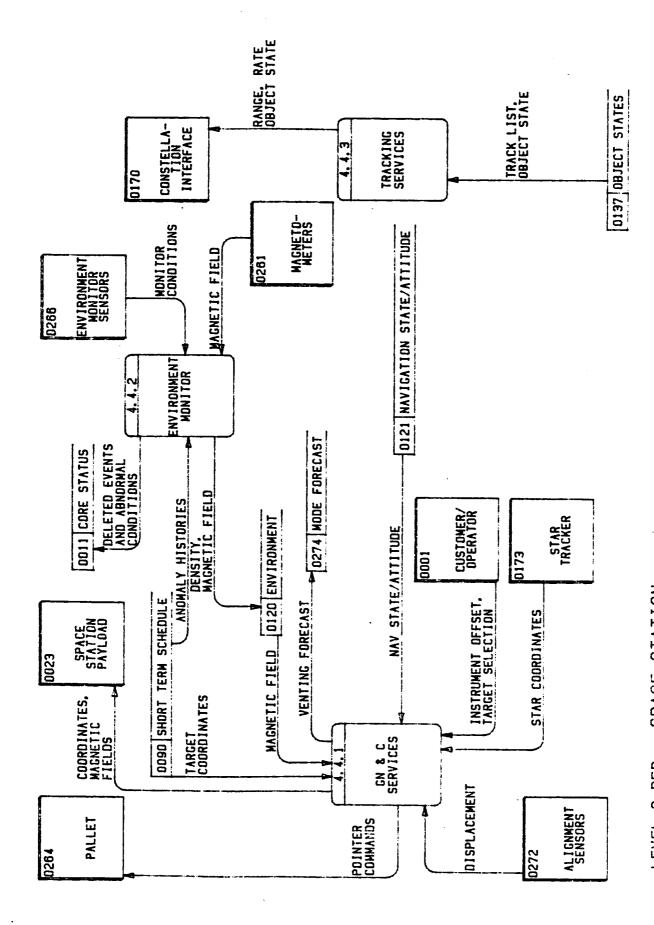


SSDS LEVEL 3 DFD-SPACE STATION 4.3.4 EVA SUPPORT

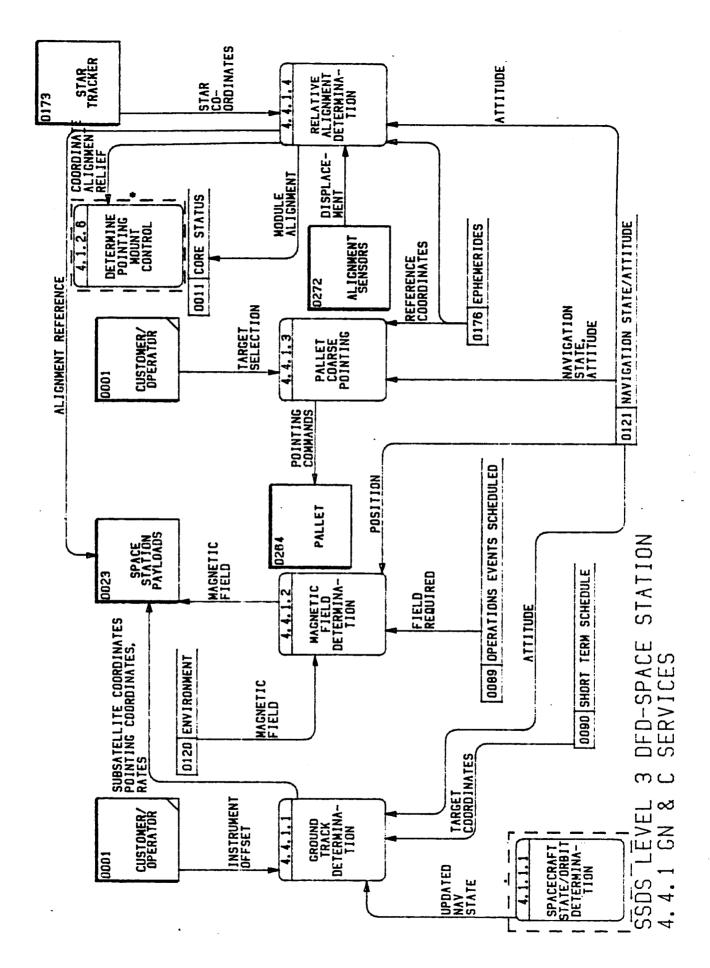


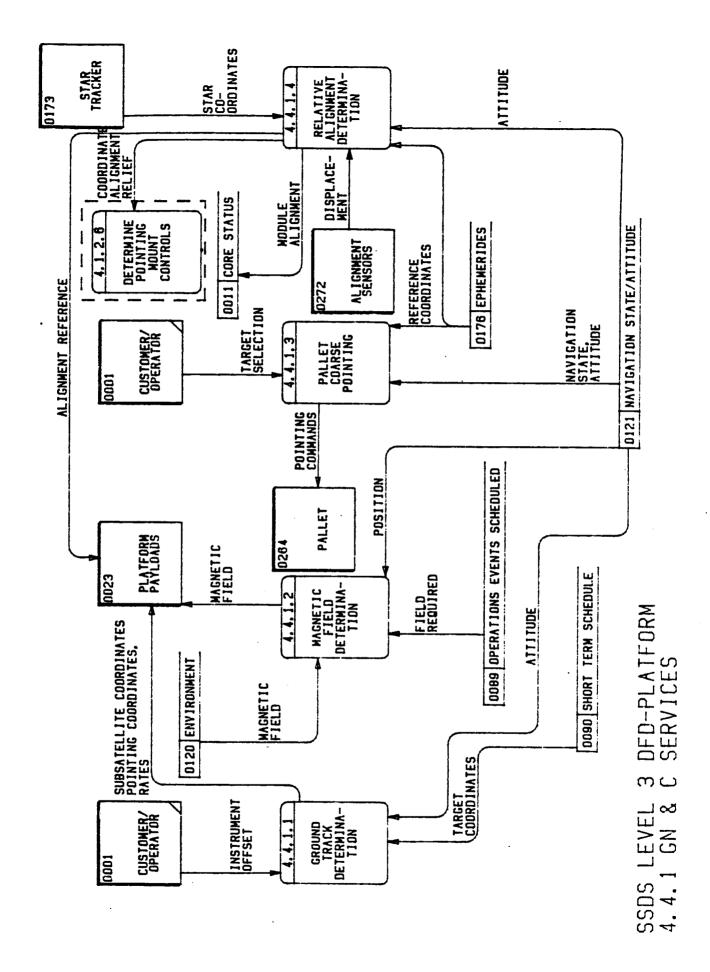


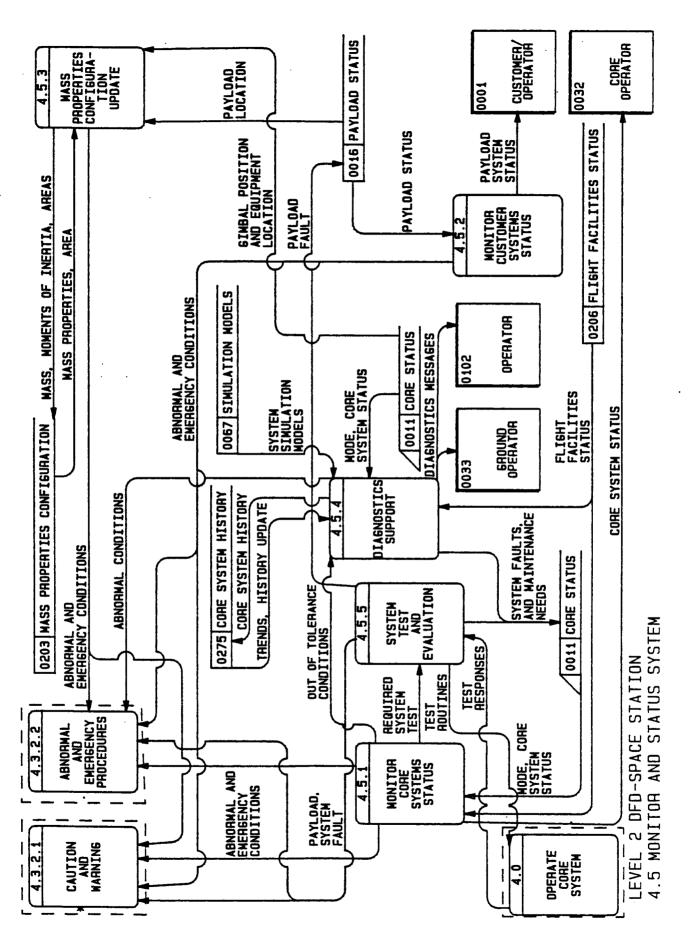
LEVEL 2 DFD -PLATFORM
4.4 PROVIDE CUSTOMER AVICNICS SERVICES

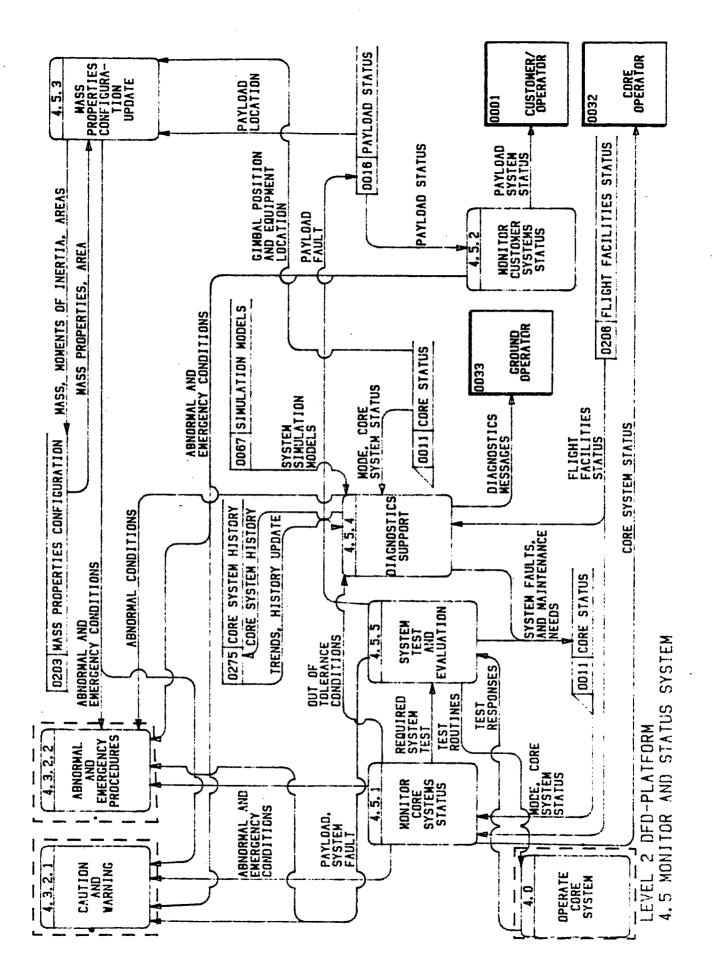


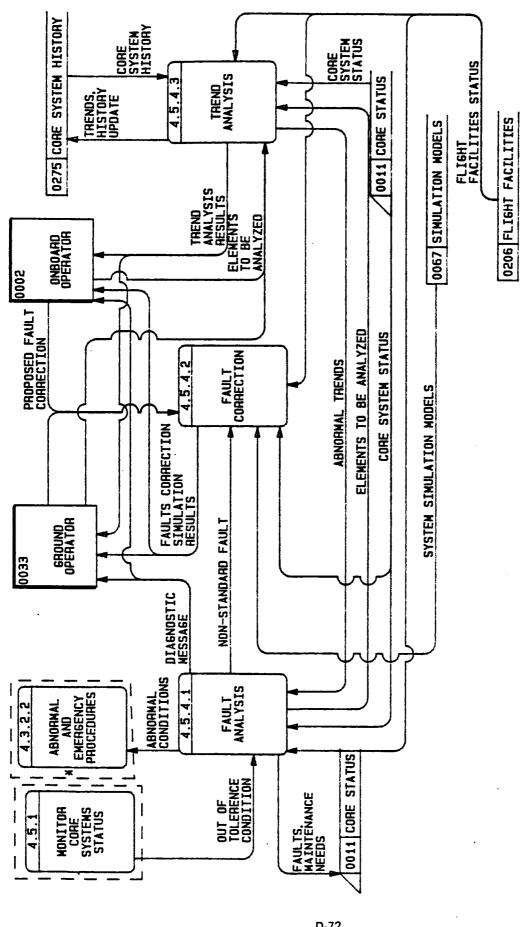
LEVEL 2 DFD -SPACE STATION
4.4 PROVIDE CUSTOMER AVIONICS SERVICES



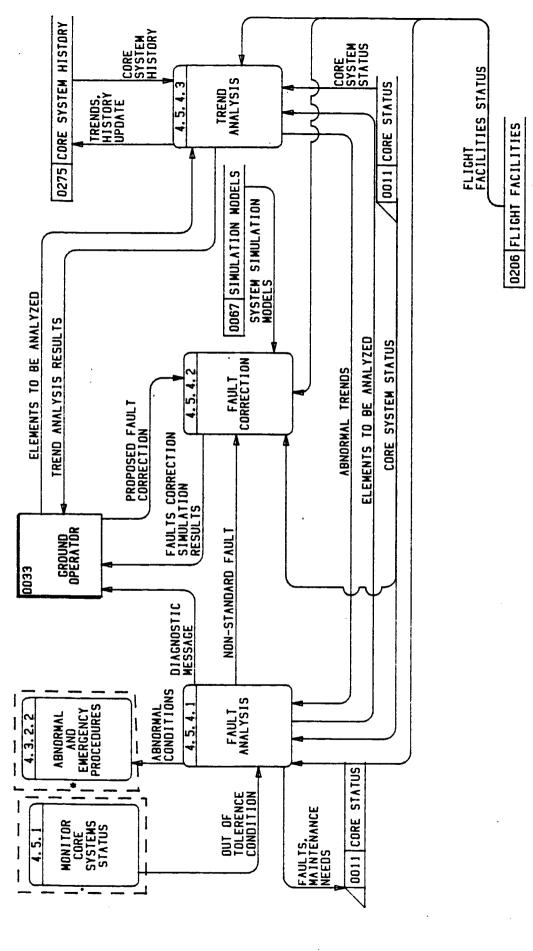




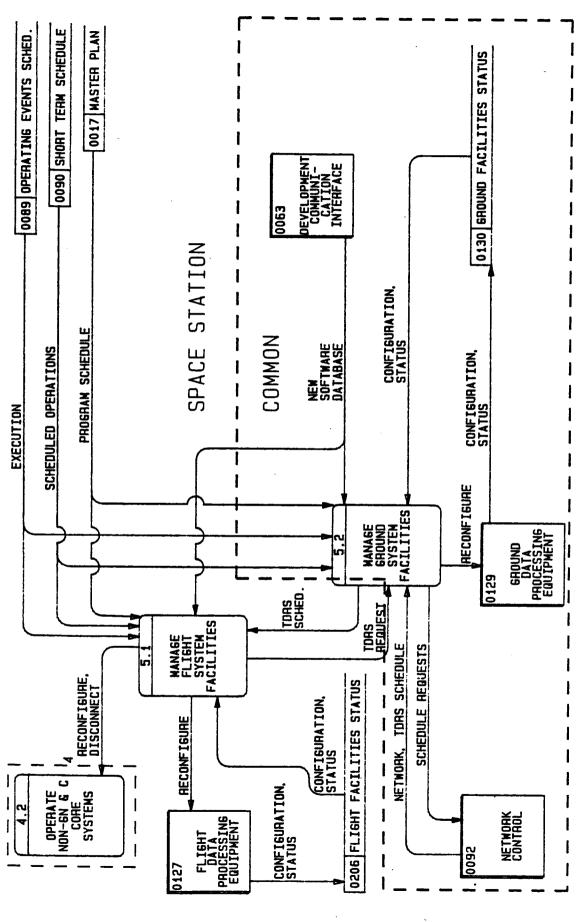




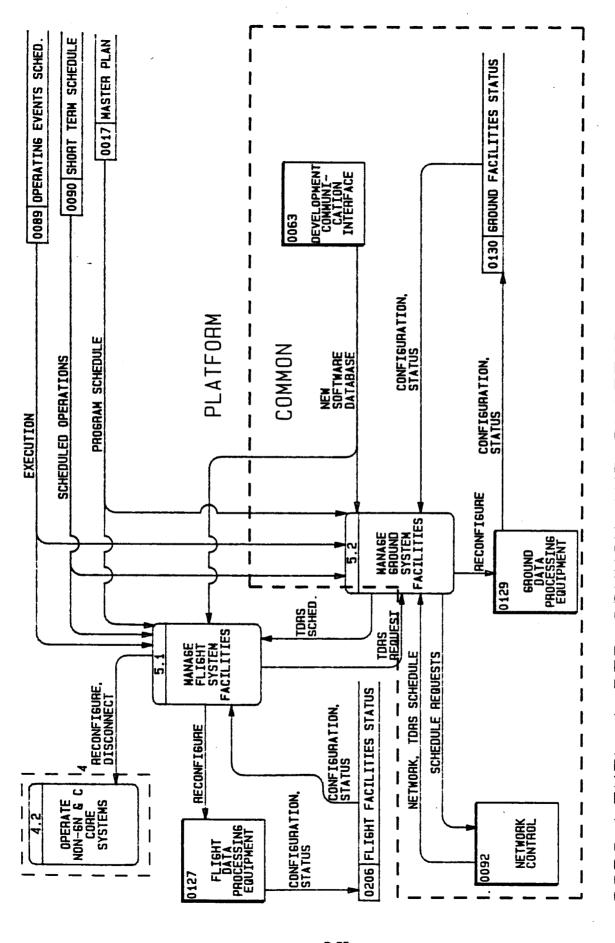
STATION SUPPORT 3 DFD-SPACE DIAGNOSTICS LEVEL 4.5.4



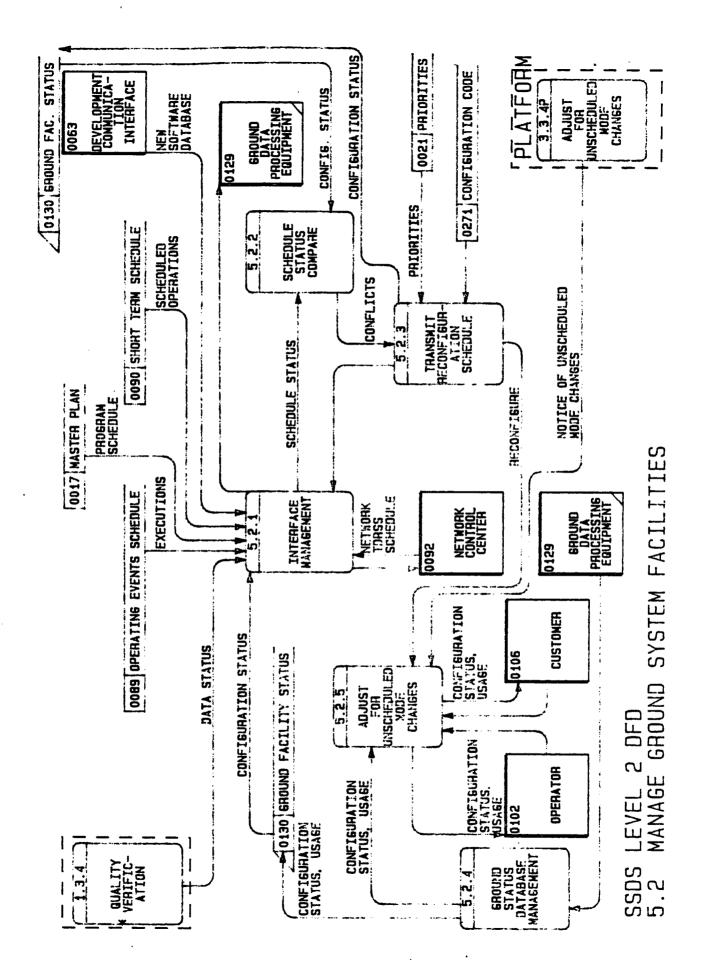
LEVEL 3 DFD-PLATFORM 4.5.4 DIAGNOSTICS SUPPORT

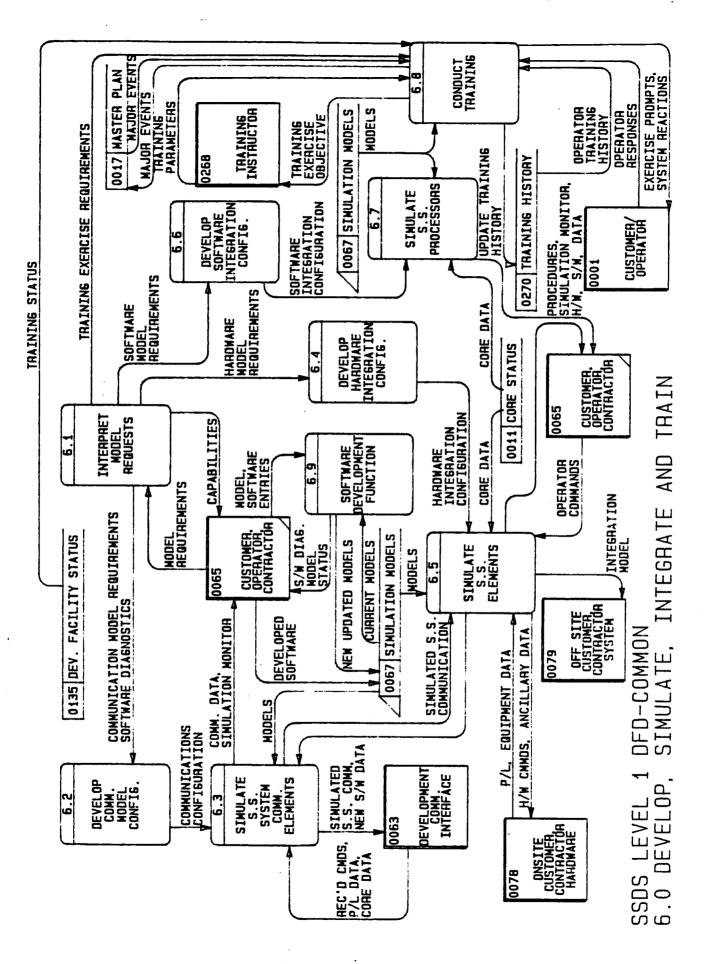


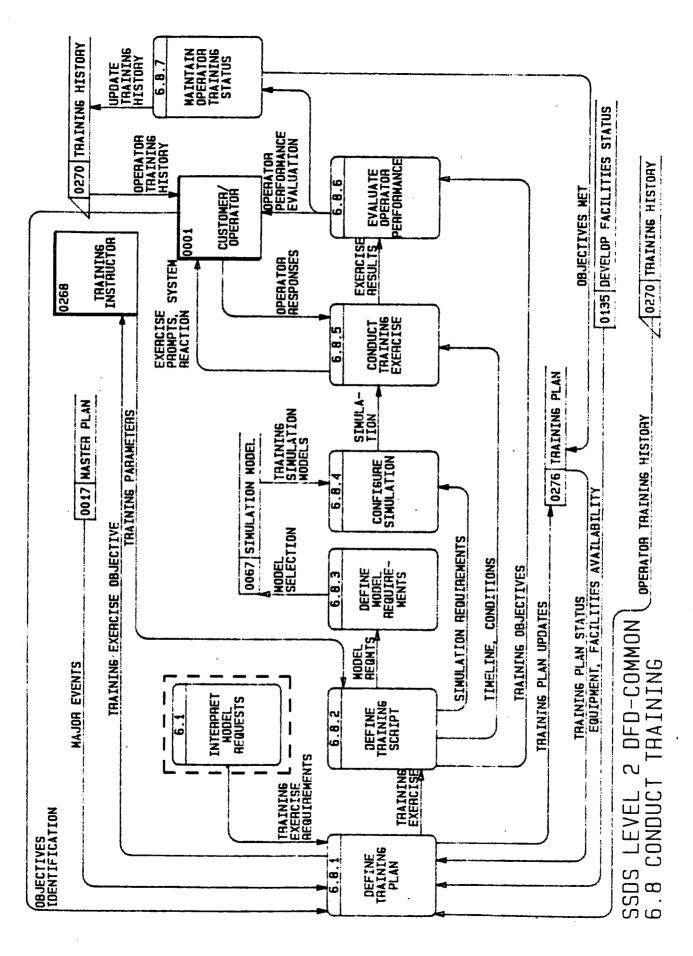
IN AND SPACE STATION AND RESOURCES -COMMON ITIES AN DFI ACII S LEVEL MANAGE SSDS | 5.0 M

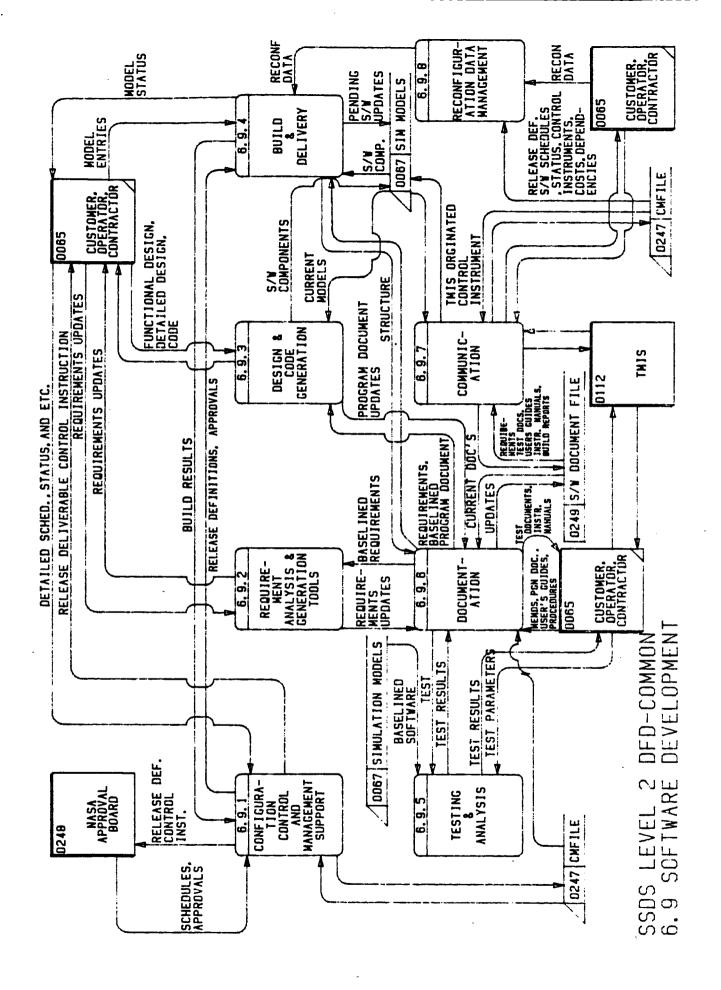


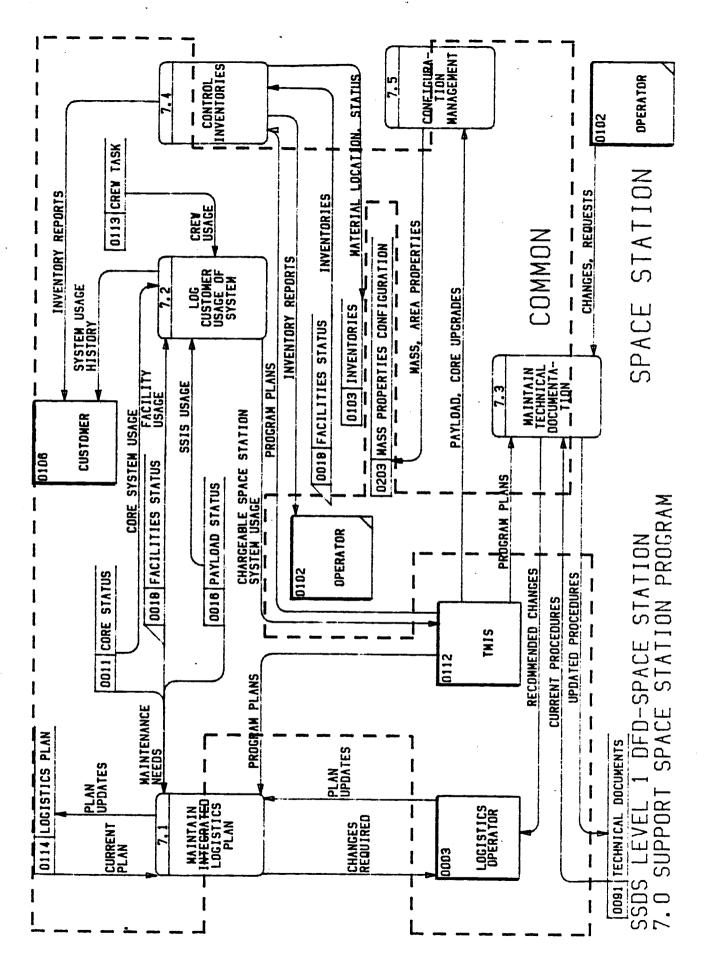
COMMON AND PLATFORM TIES AND RESOURCES DFD MANAGE 5505 5.0 N

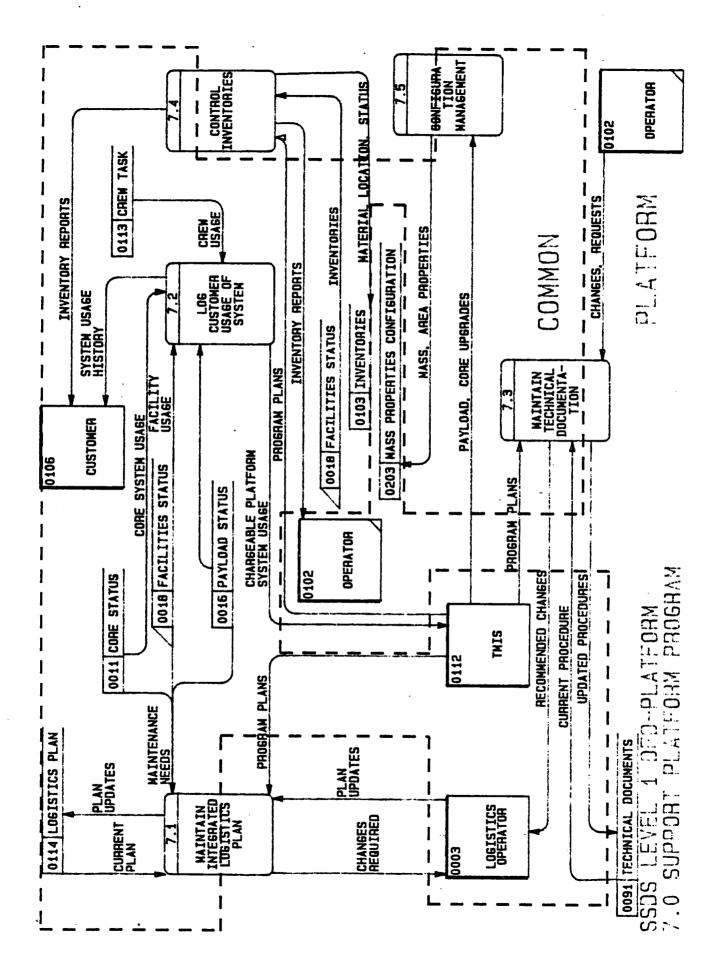


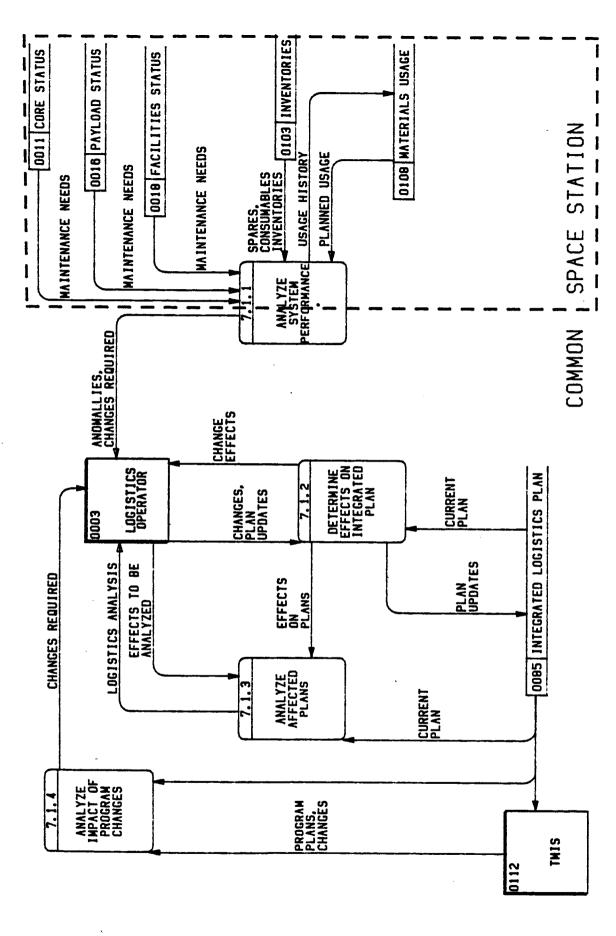




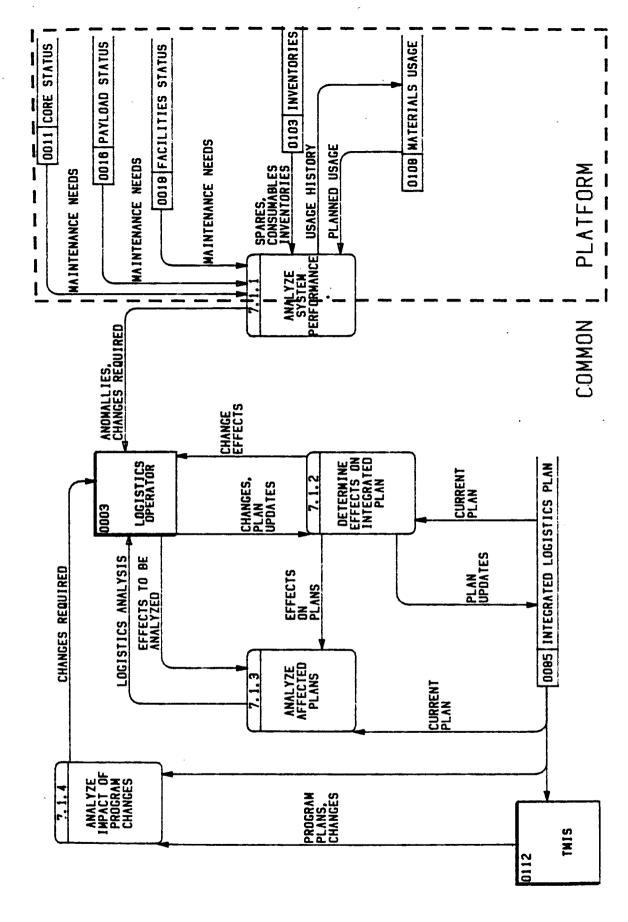




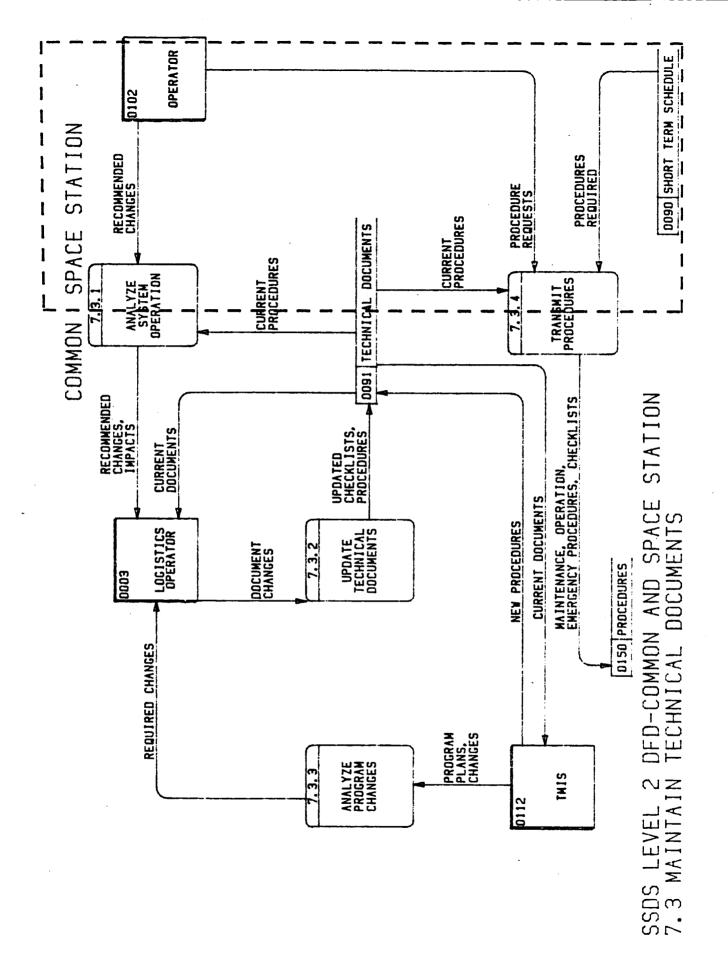


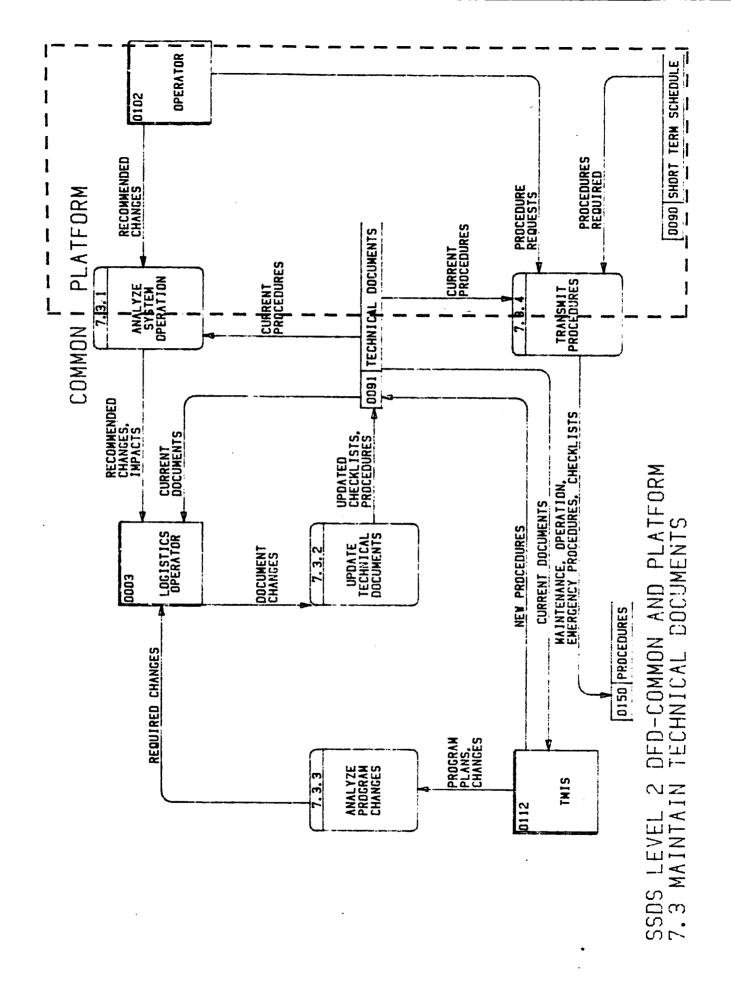


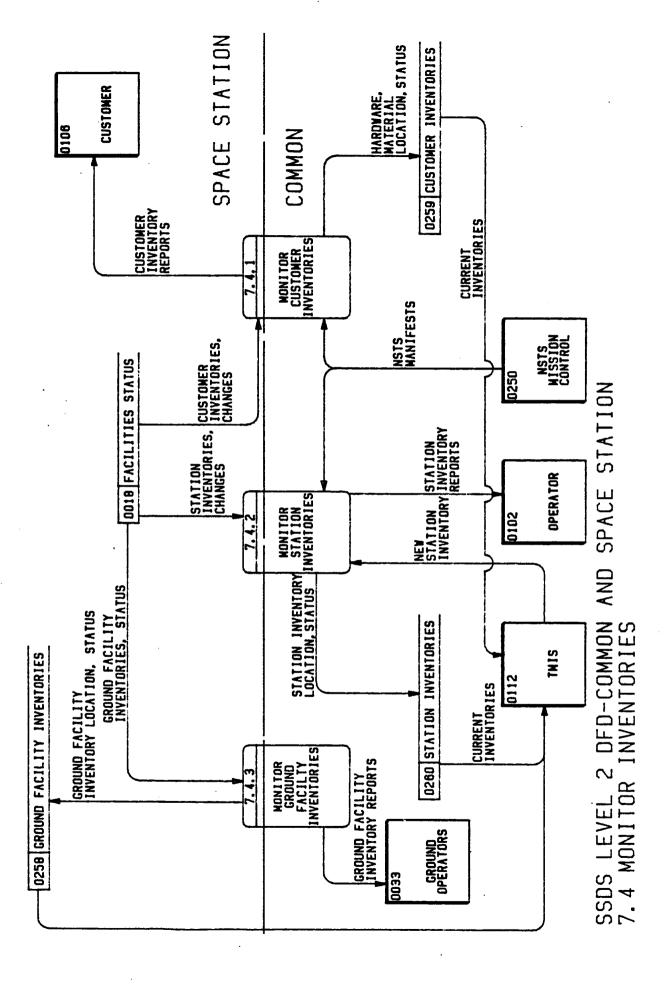
AND SPACE STATION LOGISTICS PLAN DFD-COMMON INTEGRATED SSDS LEVEL 27.1 MAINTAIN

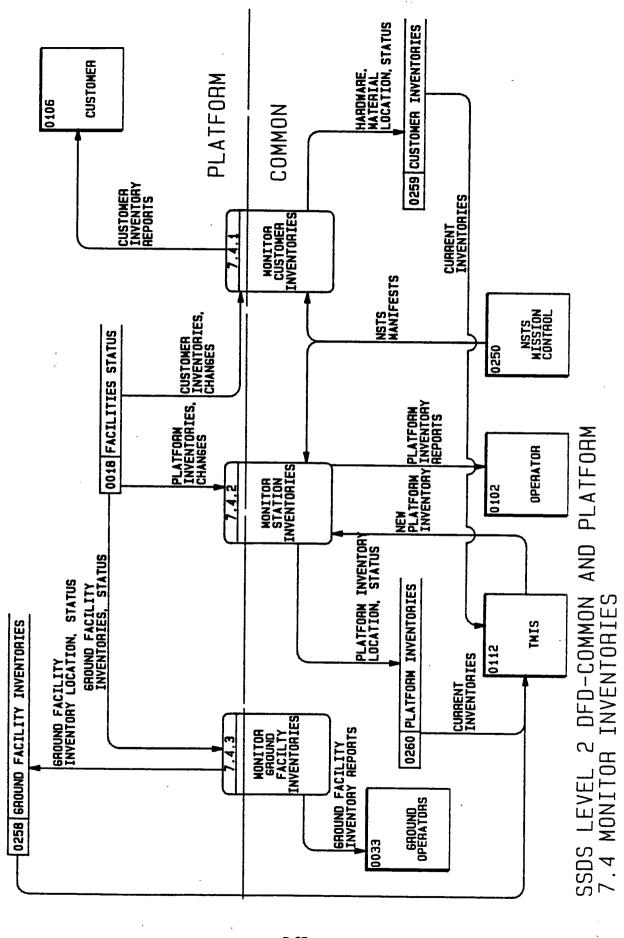



DFD-COMMON AND PLATFORM INTEGRATED LOGISTICS PLAN SSDS LEVEL 27.1 MAINTAIN









# APPENDIX E

Data Dictionary

#### APPENDIX E

## Data Dictionary

The data dictionary entries in this appendix support the data flow diagrams of Appendix D by providing definitions of the data store contents and the data flows.

E.1 Data Store contents are presented in a heirarchial arrangement of data structures and data elements. A data element is a simple data entry at its lowest useful subdivision. Data structures are assemblies of data elements and/or lower level data structures.

The data structure names in the data store contents have been selected to relate to the names of the data flows into and out of the data stores. This allows the estimates of data structure size to be derivable from the Input/Output data of the functional requirements data base, reference.

Repeated entries in the data store definitions are designated by (1\*-N) at the exit of the data structure, where N is the number of repetitions of the data structure. The lower level data structures and elements included under the repeated entry are also repeated for each entry of the repeated structure.

Occasionally, a data store will contain other data stores as data structures within the store. This is indicated by placing the data store number in parenthesis at the end of the entry. Cross referencing is used tro define these embedded data stores.

DSDSTRUCT

DS\_ DS\_NAME

EUNCTIONAL\_DESCRIPTION

11 CORE STATUS

CONTAINS CURRENT DATA ON THE STATUS AND FUNCTION-ING OF ONBOARD CORE SYSTEMS. \*GN & C STATUS (SEE TBD) \*NON+GN & C STATUS \*C & T STATUS (SEE TBD) \*TETHER SYSTEM STATUS \*POWER SYSTEM STATUS \*THERMAL SYSTEM STATUS \*MECHANISM STATUS \*MRMS SYSTEM STATUS \*MRMS MODE \*MRMS STATUS \*DOCKING PORT STATUS \*DOCKING PORT MODE \*DOCKING PORT STATUS \*OTHER MECHANISM STATUS \*MAINTENANCE NEEDS \*ECLSS STATUS (SEE TBD) \*CAUTION AND WARNING EVENTS \*EVA STATUS (SEE TBD) \*SSIS USAGE (WHERE?) \*RESUPPLY NEEDS (WHERE?) \*SYSTEM MODE \*RESOURCE AVAILABLE FORECASTS \*ANCILLARY DATA \*MODE STATUS (SEE 171) \*SYSTEM STATUS

16 PAYLOAD STATUS

CONTAIN CURRENT MODE AND STATUS OF SPACE STATION AND OTHER SSPE PAYLOADS.

\*PAYLOAD STATUS (1\*-30)

\*PAYLOAD

\*OPERATING MODE

\*STATUS

CONTAINS A SCHEDULE OF MAJOR PROGRAM EVENTS WHICH

17 MASTER PLAN

WILL AFFECT SSP NORMAL OPERATION, IDENTIFIES BLOCKS OF TIME RESERVED FOR MAJOR EVENIS AND BLUCKS AVAILABLE FOR NORMAL OPERATIONS. \*PROGRAM SCHEDULE \*NSTS ORBITER VISITS (1\*-16) \*TIME OF VISIT \*DURATION \*MANIFEST (1\*-5) \*OTV LAUNCHES (1\*-16) \*PAYLCAD \*LAUNCH DATE \*RETURN DATE (1\*-2) \*CMV LAUNCHES (1\*-50) \*PAYLOAD, MISSION \*GAUNCH DATE \*TELEOPERATION \*REQUIRED

\*DATE

## EUNCTIONAL DESCRIPTION

\*DURATION

\*MISSION DURATION

\*SATELLITE SERVICE(1\*-8)

\*SATELLITE

\*DATE

\*DURATION

\*SENSITIVITIES (1\*-5)

\*INTERFERENCES (1\*-5)

\*OTHER, TBD (1\*-50)

\*NORMAL OPERATING PERIODS (1\*-150)

\*START

\*END

18 FACILITIES STATUS

CONTAINS CONFIGURATION AND EQUIPMENT AVAILABILITY /AVAILABILITY FOR ALL SSDS FACILITIES. \*FLIGHT FACILITIES STATUS (TRD) \*SSCC FACILITIES STATUS (0130)

\*DHC FACILITIES STATUS (0133)
\*DEVELOPMENT FACILITIES STATUS (0135)

21 PRIORITIES

CONTAINS MISSION PAYLOAD OPERATION PRIORITIES FOR OPERATION AND DATA RETURN.

\*OPERATING PRIORITIES (1\*-30)

\*PAYLOAD

\*NORMAL PRIORITY

\*OPPORTUNITY PRIORITY

\*DATA RETURN PRIORITIES

\*PAYLCAD

\*REALTIME PRIORITY

\*NORMAL

\*OPPORTUNITY

\*QUICK LOOK PRIGRITY

\*NORMAL

\*JPPORTUNITY

\*BULK PRIORITY

25 DELAYED DATA

CONTAINS BULK DATA AWAITING TRANSMISSION TO THE GROUND AND ACCOUNTING OF DATA WITH FILE.

\*BULK DATA

\*BULK PAYLOAD DATA

\*BULK CORE DATA

\*BULK DATA AVAILABLE

31 COMMAND LOG

CONTAINS RECORDS OF ALL COMMANDS ENTERED, CURRENT STATUS, AND FINAL DISPOSITION. PURGED WITHIN 24 HOURS OF FINAL DISPOSITION.

\*COMMAND \*(1=N)

\*ENTERED

\*CURRENT STATUS

\*CLASSIFICATION

\*FINAL DISPOSITION

34 AUTHENTICATION

CONTAINS THE DATA NECESSARY FOR THE SSDS TO VERIFY THAT PERSONS INTERESTS COMMANDS ARE

### EUNCTIONAL DESCRIPTION

AUTHORIZED TO SEND COMMANDS TO THE INDICATED AD-DRESSES. CONTAINS ADDITIONAL CUSTOMERS ENTERED PASSWORDS TO ASSIST CUSTOMERS IN CONTROLLING ACCESS TO THEIR STORED DATA. DATA STRUCTURES ARE:

\*AUTHORIZED CUSTOMER ADDRESSES (1,30)

\*CUSTOMER IDENTIFICATION

\*CUSTOMER PASSWORD

\*AUTHORIZED CUSTOMER ADDRESSES (1.10)

\*AUTHORIZED OPERATOR, ADDRESSESS (1,100)

\*OPERATOR IDENTIFICATION

\*AUTHORIZED OPERATOR ADDRESSES (1,50)

37 COMMAND DICTIONARY

CONTAINS THE DATA NECESSARY TO DETERMINE COMMAND CLASSIFICATION AND EXECUTABILITY AND TO PLAN FOR EXECUTION. DATA STORED FOR COMMAND SEQUENCES MAKING UP AN OPERATION, AS DETERMINED BY THE CUSTOMER OR OPERATOR.

\*COMMAND BY CUSTOMER (1,30)

\*CUSTOMER IDENTIFICATION

\*CUSTOMER CLASSIFICATION

\*COMMAND IDENTIFICATION

\*COMMAND CLASSIFICATION

\*CONDITION FOR EXECUTION (1+N)

\*INTERFERENCES(1-N)

\*SUSCEPTABILITIES (1-N)

\*STORED COMMAND SEQUENCE (OPTIONAL)

67 SIMULATION MODELS

CONTAINS SIMULATION MODELS TO BE USE FOR HARDWARE AND SOFTWARE DEVELOPMENT AND INTEGRATION AND FOR LAUNCH SUPPORT, CHECKOUT, AND TRAINING.

\*MODELS

\*SOFTWARE DEVELOPMENT MODELS

\*COMMUNICATION MODELS

\*CUSTOMER SCFTWARE MODELS

\*OPERATOR SOFTWARE MODELS

\*CONTRACTOR SOFTWARE MODELS

\*SOFTWARE INTEGRATION MODELS

\*SPACE STATION SIMULATIONS

\*TRAINING EXERCIZE MODELS

84 RECURRING OPERATIONS

CONTAINS OPERATION MASTERS OR CHARACTERISTICS FOR RECURRING SPACE STATION, SPACECRAFT, AND PAYLOAD OPERATIONS TO BE USED IN SCHEDULING AND SCHEDULE CONFLICT VIOLATIONS.

\*OPERATION MASTERS

\*PAYLOAD OPERATION MASTERS (1\*=N)

\*OPERATION CODE

\*TIMELINE

\*RESOURCE PROFILE

\*SENSITIVITIES

\*INTERFERENCES

\*POTENTIAL CONFLICTS

\*SPACE STATION OPERATION MASTERS (1\*-N)

## EUNCIIONAL DESCRIPTION

\*OPERATION CODE \*TIMELINE \*RESOURCE PROFILE \*SENSITIVITIES \*INTERFERENCES \*POTENTIAL CONFLICTS \*MAJOR EVENT OPERATION MASTERS (1\*-N) \*OPERATION CODE \*TIMELINE \*RESOURCE PROFILE \*SENSITIVITIES \*INTERFERENCES

85 INT. LOGISTICS PLAN

CONTAINS INTEGRATED LOGISTICS PLANS FOR ALL SSPE'S.

\*POTENTIAL CONFLICTS

\*ORBITAL MAINTENANCE PLAN \*SPACE STATION ORBITAL MAINTENANCE PLAN \*PLATFORM ORBITAL MAINTENANCE PLAM (1\*-4) \*TECHNICAL SUPPORT PLAN \*SUPPORT EQUIPMENT PLAN \*SPACE STATION SUPPORT EQUIPMENT PLAN \*PLATFORM SUPPORT EQUIPMENT PLAN(1+-4) \*SUPPLY SUPPORT PLAN \*FACILITIES PLAN \*TRANSPORTATION PLAN \*TECHNICAL INFORMATION SYSTEM PLAN \*SPACE STATION INFORMATION PLAN \*PUATFORM INFORMATION PLAN (1\*-4)

\*PERSONNEL TRAINING PLAN \*SPACE STATION TRAINING PLAN \*PLATFORM TRAINING PLAN (1\*-4)

87 MAJOR EVENT OPERATIO NS

CONTAINS PRIOR OPERATING SCHEDULES FOR EACH TYPE

OF MAJOR EVENT TO SERVE AS A REFERENCE IN DEVELOPING SCHEDULES.

\*MAJOR EVENT OPERATIONS \*NSTS ORBITER OPERATIONS \*CMV OPERATIONS \*OTV OPERATIONS \*LAUNCH SERVICES OPERATIONS \*FREE FLYERS SERVICES OPERATIONS \*BUILDUP OPERATIONS

\*MAJOR MAINTENANCE CPERATIONS \*PAYLOAD ADDITION OPERATIONS

89 OPERAT. EVENTS SCHED ULE

CONTAINS TIME TAGGED COMMANDS TO EXECUTE SCHED-

ULED OPERATIONS. \*TIME TAGGED OPERATION (1\*-N) \*EXECUTION TIME \*OPERATION \*ADDRESS

## EUNCIIONAL DESCRIPTION

#### \*COMMAND

90 SHORT TERM SCHEDULE

CONTAINS SHORT TERM OPERATING SCHEDULES FOR ALL SSP FACILITIES AND PAYLOADS. INCLUDES COORIN-ATED USE OF END-TO-END DATA NETWORKS AMONG SSPE'S.

\*SCHEDULED OPERATIONS

\*SCHEDULED SPACE STATION OPERATIONS

\*SCHEDULED CORE OPERATIONS

\*SCHEDULED PAYLOAD OPERATIONS

\*SCHEDULED RESQUECE UTILIZATION

\*THERMAL LOAD FORECASTS

\*ELECTRICAL LOAD FORECASTS

\*CREW TIME FORECASTS

\*COMMUNICATION TRAFFIC FORECASTS

\*SCHEDULED COP OPERATIONS

(SIMILAR TO SPACE STATION)

\*SCHEDULED POP OPERATIONS

(SIMILAR TO SPACE STATION)
\*SCHEDULED SSDS FACILITY OPERATIONS
\*FACILITY (1\*-N)

\*SCHEDULED OPERATIONS
\*SCHEDULED RESOURCE UTILIZATION

91 TECHNICAL DOCUMENTS

CONTAINS MANUALS, PROCEDURES, AND CHECKLISTS FOR OPERATING AND MAINTAINING SSPE'S.

\*OPERATING PROCEDURE

\*SPACE STATION GROUND OPERATION

\*SPACE STATION ONBOARD OPERATION

- \*PLATFORM OPERATION

\*CMV OPERATION

\*OTV OPERATION

\*PAYLOAD OPERATION

\*MAINTENANCE PROCEDURES

\*SPACE STATION MAINTENANCE PROCEDURES

\*PLATFORM MAINTENANCE PROCEDURES (1\*-4)

\*OMV MAINTENANCE PROCEDURES

\*OTV MAINTENANCE PROCEDURES

\*PAYLOAD MAINTENANCE PROCEDURES (1\*+80)

\*FREE FLYER SERVICING AND

MAINTENANCE (1\*-50)

\*ASSEMBLY AND TEST PROCEDURES (1\*-30)

\*CHECKLISTS (1\*-120)

103 INVENTORIES

CONTAINS CURRENT INVENTORIES AND RESUPPLY NEEDS FOR ALL SSP FACILITIES.

\*GROUND FACILITY INVENTORIES (SEE 253)

\*CUSTOMER INVENTORIES (SEE 259)

\*STATION INVENTORIES (SEE 260)

108 MATERIALS USAGE

CONTAINS EXPECTED AND ACTUAL USAGE RATES OF CON-SUMABLES AND EXPENDABLES TO DETERMINE EXCESSIVE DEVELS OF USAGE AND REVISE SUPPLY SUPPORT PLANS OR DETERMINE REASONS FOR EXCESSIVE USAGE.

```
DS_ DS_NAME
MO
```

## EUNCTIONAL\_DESCRIPTION

\*MATERIALS USAGE \*SPACE STATION USAGE \*PLATFORM USAGE (1\*-4) \*PAYLOAD USAGE (1\*-80) \*GRCUND FACILITY USAGE (1\*-30)

109 MANUALS

CONTAINS CURRENT SYSTEM MANUALS TO BE USED THROUGHOUT THE SYSTEM AND AVAILABLE BY ELECTRONIC DATA TRANSFER.

117 TASK STATUS LOG

CONTAINS PENOING TASKS TO BE ACCOMPLISHED BY THE ONBOARD SYSTEMS, CREW AND THEIR CURRENT STATUS.

\*PENDING TASKS

\*TASK

\*NEED DATE

\*TASK STATUS

117 TASK STATUS LOG

CONTAINS CURRENT LIST OF CREW SYSTEM TASKS TO BE PERFORMED, SCHEDULE DATA, AND DISPOSITION,

\*CREW TASKS (0113)

\*CREW TASK PENDING

\*CREW TASK TO BE PERFORMED

\*SCHEDULED REQUIREMENTS

\*CREW TASK SCHEDULE

\*TASKS COMPLETED

\*PERFORMED BY

\*TIME COMPLETED

\*ELASPED TIME

\*SYSTEM TASKS

\*SYSTEM TASKS PENDING

\*SYSTEM TASKS COMPLETED

120 ENVIRONMENT

CONTAINS CURRENT ESTIMATE OF RESIDUAL ATMOSPHERIC DENSITY AND MAGNETIC FIELD.

\*DENSITY

\*MAGNETIC FIELD

121 NAV. STATE/ATTITUDE

CONTAINS CURRENT SPACE STATION NAVIGATION STATE VECTOR AND ATTITUDE.

\*SPACE STATION NAVIGATION STATE/ATTITUDE

\*STATE

\*POSITION

\*VELOCITY

\*ATTITUDE

\*CRBIT

\*ATTITUDE

\*INCLINATION

\*NODAL CRUSSING

\*BETA ANGLE

\*CONSTELLATION NAVIGATION STATE (1\*-4)

\*CONSTELLATION ELEMENT

\*STATE

\*POSITION

E-8 \*VELOCITY

## EUNCIIONAL\_DESCRIPTION

\*ATTITUDE

\*ORBIT

\*ATTITUDE

\*INCLINATION

\*NODAL CROSSING

\*BETA ANGLE

\*COFLYER RELATIVE STATES (1\*-4)

\*COFLYER ELEMENT

\*RELATIVE STATE

\*RELATIVE POSITION

\*RELATIVE VELOCITY

\*ATTITUDE

\*TIME

123 ENGR. DATA ARCHIVE

CONTAINS HISTORICAL DATA RECORDS AT LEVEL 18 AND BELOW FOR SSPE'S.

\*ARCHIVAL ENGINEERING DATA

\*ANALYZED CORE DATA

\*DATA CATALOG

\*RETRIEVAL

\*OPERATOR COMMUNICATION

\*OPERATOR VOICE COMMUNICATION \*OPERATOR VIDEO COMMUNICATION

DULE

124 SHORT TERM CORE SCHE CONTAINS SPACE STATION CURRENT AND RECENT OPERAT-

ING DATA FOR USE BY GROUND OPERATORS AND SYSTEMS IN MONITORING AND CONTROLLING THE SPACE STATION.

\*CORE OPERATING DATA

125 DATA ACCOUNTING

CONTAINS A LIST OF ALL CUSTOMER AND CORE DATA DOWNLINKED DURING THE LAST TBD DAYS AND CUPRENT LUCATION.

\*CORE DATA ACCOUNTING

\*IDENTIFICATION

\*DESCRIPTION

\*CURRENT LOCATION

\*CUSTOMER DATA ACCOUNTING

\*IDENTIFICATION

\*CUSTOMER

\*TIME TAG

\*CURRENT LOCATION

126 CORE DATA BUFFER

PROVIDES TEMPORARY STORAGE FOR RAW, BULK CORE

DATA PRIOR TO PROCESSING.

\*BULK CORE DATA

\*CORE STATUS DATA (SEE 0011 CORE STATUS)

\*CREW STATUS DATA (SEE 0204 CREW STATUS)

\*OBJECT STATES (SEE 0137 OBJECT STATES)

\*DATA SENT

130 SSCC FACILITIES STAT US

CONTAINS CONFIGURATION AND EQUIPMENT AVAILABILITY

/CAPABILITY AND USAGE FOR SECO FACILITIES.

## EUNCTIONAL DESCRIPTION

\*SSCC FACILITIES STATUS

\*CONFIGURATION

\*EQUIPMENT STATUS

\*FACILITIES USAGE

\*INVENTORIES

132 SATELLITE FAC. STATU

CONTAINS CURRENT STATUS OF MULTIPLE GROUND

FACILITIES TO BE DEFINED DURING TASKS 3 AND 4.

\*RDC FACILITIES STATUS (1\*+N)

\*CONFIGURATION

\*EQUIPMENT STATES

\*FACILITIES USAGE

\*INVENTORIES

\*POCC FACILITIES STATUS (1\*-N)

\*CONFIGURATION

\*EQUIPMENT STATES

\*FACILITIES USAGE

\*INVENTORIES

\*FREE FLYER CONTROL STATUS

\*CONFIGURATION

\*EQUIPMENT STATES

\*FACILITIES USAGE

\*INVENTORIES

\*POP CONTROL CENTER STATUS

\*CONFIGURATION

\*EQUIPMENT STATES

\*FACILITIES USAGE

\*INVENTORIES

\*COP CONTROL CENTER STATUS

\*CONFIGURATION

\*EQUIPMENT STATES

\*FACILITIES USAGE

\*INVENTORIES

\*ENGINEERING DATA CENTER STATUS

\*CONFIGURATION

\*EQUIPMENT STATES

\*FACILITIES USAGE

\*INVENTORIES

133 DHC FACILITIES STATU

CONTAINS CONFIGURATION AND EQUIPMENT AVAILABILITY

/CAPABILITY AND USAGE FOR THE DATA HANDLING CENTER FACILITIES.

\*DHC FACILITIES STATUS

\*CONFIGURATION

\*EQUIPMENT STATUS

\*FACILITIES USAGE

\*INVENTORIES

135 DEV. FACILITIES STAT

CONTAINS CONFIGURATION AND EQUIPMENT AVAILABILITY

/CAPABILITY AND USAGE FOR THE DHC FACILITIES. \*DHC FACILITIES STATUS

## **EUNCTIONAL\_DESCRIPTION**

\*CONFIGURATION
\*EQUIPMENT STATUS
\*FACILITIES USAGE
\*TRAINING STATUS

\*INVENTORIES

137 OBJECT STATES

CONTAINS ORBIT AND NAVIGATION STATE DATA FOR NON-COOPERATING OBJECTS IN OR NEAR THE SPACE STATION ORBIT.

\*OBJECT NAVIGATION STATE (1\*\*N)

\*OBJECT IDENTIFICATION

\*OBJECT STATE

\*POSITION

\*VELOCITY

\*OBJECT ORBIT

\*ATTITUDE

\*INCLINATION

\*ECCENTRICITY

\*NODAL CROSSING

\*OBJECT RELATIVE STATE

\*RELATIVE POSITION \*RELATIVE VELOCITY

139 REALTIME DATA BUFFER

CONTAINS REALTIME PAYLOAD AND CORE DATA AWAITIG

\*REALTIME DATA
\*REALTIME DATA QUEUEING LIST

141 P/L OPS DATA BASE

CONTAINS CURRENT DATA PERTINENT TO ONBOARD CUSTOMER/OPERATOR REALTIME OPERATION OF PAYLOAD, \*PAYLOAD OPERATING DATA (1\*-30) \*PAYLOAD

\*OPERATING DATA

142 PREPROCESSED DATA BU

CONTAINS DATA IN TEMPORARY BUFFER STORAGE BETWEEN

GENERAL PREPROCESSING (PARITAL LEVEL O) AND TRANSMISSION.
\*PREPROCESSED DATA

149 OTV STATUS

CONTAINS CURRENT INFORMATION ON THE CONFIGURATION AND OPERATIONAL READINESS OF THE CTV, TOGETHER WITH KEY CURRENT MISSION DATA.

\*OTV STATUS (1-2)

\*GTV IDENTIFICATION

\*CTV READINESS

\*CHECKOUT DIAGNOSTICS

\*CONFIGURATION

\*OTV MISSION DATA

\*RENDEZVOUS TARGETING

\*OTV STATE

\*POSITION

\*VELOCITY

\*RELATIVE POSITION

## **EUNCTIONAL\_DESCRIPTION**

\*RELATIVE VELCCITY
\*OTV ATTITUDE
\*OTV PAYLOAD STATUS

150 PROCEDURES

CONTAINS RECONFIGURABLE FILE OF PROCEDURE FOR OPERATION AND MAINTENANCE OF SSPE'S AND PAYLOADS, INCLUDINT SPACE STATION.

\*SPACE STATION PROCEDURE

\*ABNORMAL AND EMERGENCY PROCEDURES

\*OPERATING PROCEDURES
\*MAINTENANCE PROCEDURES

\*EVA PROCEDURES

\*DECONTAMINATION PROCEDURES \*OTV MAINTENANCE PROCEDURES

\*OMV MAINTENANCE PROCEDURES

\*CHECKLISTS

\*SSPE PROCEDURES (1\*-N)

\*SSPE OPERATING PROCEDURES
\*SSPE MAINTENANCE PROCEDURES

151 MAINTENANCE LOG

CONTAINS A RECORD OF SSPE MAINTENANCE ACTIONS PERFORMED.

\*MAINTENANCE ACTIONS

\*OTV MAINTENANCE ACTION

\*MAINTENANCE ACTION

\*DATA PERFORMED

\*PART NUMBER

\*OMV MAINTENANCE ACTION (SIMILAR TO OTV)

\*STATION MAINTENANCE ACTION

(SIMILAR TO OTV)

\*PAYLOAD MAINTENANCE ACTION (SIMILAR TO OTV)

\*EMU MAINTENANCE ACTION

\*MMU MAINTENANCE ACTION \*SSPE MAINTENANCE ACTION

153 OMV STATUS

CONTAINS CURRENT INFORMATION ON THE CONFIGURATION AND OPERATION READINESS OF THE QMV, TOGETHER WITH KEY CURRENT MISSION DATA.

\*OMV STATUS (1-3)

\*OMV IDENTIFICATION

\*OMV READINESS

\*CHECKOUT DIAGNOSTICS

\*CONFIGURATION

\*OMV MISSION DATA

\*RENDEZVOUS TARGETING

\*UMV STATE

\*POSITION

\*VELOCITY

\*RECATIVE POSITION (1-3)

\*RELATIVE VELCCITY (1-2)

\*OMV ATTITUDE

\*OMV PAYLOAD STATUS

EUNCTIONAL\_DESCRIPTION

171 MODE STATUS

CONTAINS CURRENT OPERATIONS MODE FOR SPACE STATION SYSTEM, SUBSYSTEM AND PAYLOAD SUBSYSTEM AND PAYLOAD STATUS STORES.

\*MODES

\*SPACE STATION MODES \*CORE SYSTEM MODE (1\*-12) \*PAYLOAD MODE (1\*=30) .

174 NAV. STATE FORECAST

CONTAINS FORECAST NAVIGATION STATES FOR THE SPACE STATION AND COFLYER.

> \*SPACE STATION NAVIGATION STATE FORECAST \*(CONTENT SIMILAR NAV STATE/ATTITUDE) \*COFLYER NAVIGATION STATE FORECAST (1\*-100) \*(CONTENT SIMILAR NAV STATE/ATTITUDE)

175 STAR/OBJECT CATALOG

CONTAINS ABSOLUTE REFERENCE COORDINATES FOR MAJOR STARS AND SATELLITES TO BE USED IN DETERMINING EPHEMERIDES.

> \*STAR CATALOG (1\*-N) \*OBJECT CATALOG \*TDRSS (1\*-3)

176 EPHEMERIDES

CONTAINS CURRENT RELATIVE LOCATION OF SPACE OBJECTS SUCH AS SATELLITES, SUN, MOON, PLANETS AND STARS.

> \*OBJECT EPHEMERIDES \*TDRSS SATELLITE \*GPS SATELLITE \*SUN \*MOON \*PLANETS \*STAR EPHEMERIDES

193 POWER SYSTEM STATUS

CONTAINS CURRENT DATA ON THE STATUS, MODES OR CONFIGURATION OF POWER SYSTEM EQUIPMENT, AND FUNCTIONING OF POWER EQUIPMENT.

> \*POWER SYSTEM STATUS \*ARRAY STATUS \*ARRAY MODE

\*ARRAY FAULTS

\*ARRAY PERFORMANCE

\*STORAGE STATUS

\*STORAGE CONFIGURATION

\*STORAGE FAULTS

\*STORAGE PERFORMANCE

\*SOURCE CONFIGURATION

\*ENERGY FORECAST

\*DISTRIBUTION STATUS

\*DISTRIBUTION CONFIGURATION

\*DISTRIBUTION FAULTS

\*LOAD STATUS

\*LOADS CONNECTED

\*POWER DEMAND

## EUNCIIONAL\_DESCRIPTION

\*ENERGY HISTORY
\*MAINTENANCE NEEDS

199 ECLSS STATUS

CONTAINS CURRENT ECLSS EQUIPMENT OPERATING MODES AND FUNCTIONING.

\*ECLSS DATA

\*ATMOSPHERIC SYSTEM DATA

\*SYSTEM MODE

\*TEMPERATURE

\*COMPOSITION

\*PRESSURE

\*HUMIDITY

\*HAZARDOUS GASES, VAPORS

\*EQUIPMENT STATUS

\*MAKING FLOW RATES

\*MAINTENANCE NEEDS

\*GREY WATER SYSTEM STATUS

\*CONFIGURATION

\*LEVEL

\*CONTAMINATIONS

\*MAINTENANCE NEEDS

\*POTABLE WATER SYSTEM STATUS

\*CONFIGURATION

\*LEVEL

\*CONTAMINATIONS

\*MAINTENANCE NEEDS

200 THERMAL SYSTEM STATU

CONTAINS CURRENT DATA ON THE MODE, FUNCTIONING

AND PERFORMANCE OF THE THERMAL CONTROL SYSTEM EQUIPMENT.

\*THERMAL SYSTEM DATA

\*OPERATING MODE

\*THERMAL SYSTEM STATUS

\*BUS AND RADIATOR FLUIDS LOOP STATUS

\*PAYLOAD I/F HX PERFORMANCE

\*BUS PERFORMANCE

\*THERMAL LOAD CAPACITY FORECAST

\*MAINTENANCE NEEDS

203 CREW STATUS

CONTAINS CURRENT RECORDS OF CREW MEDICAL DATA, OPERATIONS, SCHEDULES, AND TRAINING.

\*CREW DATA

\*MEDICAL RECORD

\*PHYSIOLOGICAL RECORD

\*NORMAL PHYSIOLOGICAL READINGS

\*ABNORMAL PHYSICLOGICAL DATA

\*REDUCED/ANALYZED PHYSIOLOGICAL DATA

\*NUTRIENT BALANCE

\*NUTRIENT INTAKE

\*EXERCIZE PLAN

\*SNERGY EXPENDITURE

\*TRAINING RECURDS

### EUNCTIONAL\_DESCRIPTION

\*PROCEDURES COMPLETED \*PROCEDURES REQUIRED \*CREW PRIVATE MAIL

203 MASS PROPERTIES CONFIG.

CONTAINS STATION MASS PROPERTIES AREAS, MOMENT OF

INTERIA, AND FLEXIBLE BODY MODES.

\*MASS PROPERTIES

\*STATION MASS

\*MOMENT OF INTERIA

\*MASS DISTRIBUTION

\*OMV MASS

**\*OTV MASS** 

\*NSTS ORBITER MASS

\*LARGE CONSTRUCTION MASS

\*AREA PROPERTIES

\*STATION AREA (3)

\*AREA MOMENT (3)

\*NSTS AREA (3)

\*LARGE CONSTRUCTION AREA (3)

\*ARTICULATED AREAS

\*RADIATOR CONFIGURATION

\*SOLAR ARRAY CONFIGURATION

\*THRUSTER PROPERTIES (1-N)

\*THRUST

\*VECTOR DIRECTION (3)

\*MOMENT AREA

\*DYNAMIC PROPERTIES

\*FLEXIBLE BODY MODES (30)

\*DAMPING COEFFICIENTS (30)

215 RECREATION

CONTAINS VIDEO MATERIAL FOR CREW RECREATION.
\*RECREATION MATERIAL

228 LONG TERM ARCHIVE

CONTAINS ARCHIVES OF CUSTOMER DATA FOR UP TO TWO YEARS. DATA ARE PROCESSED AT LEAST TO LEVEL O, AND MAY BE PROCESSED TO LEVELS BEYOND 1A BY THE CUSTOMER.

\*ARCHIVAL DATA

\*LEVEL O CUSTOMER DATA

\*LEVEL 1A CUSTOMER DATA

\*HIGHER LEVEL CUSTOMER DATA

230 PAYLOAD DATA BUFFER

PROVIDES TEMPORARY STORAGE FOR RAW, BULK PAYLOAD DATA PRIOR TO PROCESSING.

\*BULK CUSTOMER DATA (1\*-32)

\*PAYLOAD

\*CUSTOMER

\*PAYLOAD DATA

231 CUSTOMER COMMANDS

CONTAINS STORED COMMAND SEQUENCES. \*CUSTOMER COMMANDS (1\*=100)

\*IDENTIFIES

\*COMMAND SEQUENCE

EUNCTIONAL DESCRIPTION

240 COMM. EQUIPMENT STAT (SEE 254)

241 COMMUNICATION MONITO

(SEE 254)

243 RECONFIG. PROCEDURES

CONTAINS A STANDARD LIBRARY OF AUTOMATED RECON-FIGURATION PROCEDURES TO MAINTAIN MAXIMUM COMM-UNICATIONS CAPABILITY IN THE EVENT OF COMMUNICA-TIONS EQUIPMENT MALFUNCTION OF FAILURE. \*RECONFIGURATION PROCEDURES

244 TELEMETRY TABLE

CONTAINS TELEMETRY ROUTING INFORMATION TO SELECT THE MOST APPROPRIATE NETWORK ROUTING FOR PURPOSE AND CORE TELEMETRY. \*TELEMETRY ROUTING

\*CORE ROUTING \*PAYLOAD ROUTING (1\*-30)

245 NETWORK PLAN LINK PR IOR.

CONTAINS NETWORK PLANS AND PRIORITIES FOR LINK

OPTIONS.

\*NETWORK PLAN \*LINK PRIORITIES

252 EVA STATUS

CONTAINS CURRENT STATUS, MODE AND FUNCTION OF EMU, MMU, AIRLOCK AND OTHER EVA EQUIPMENT. \*EVA DATA

\*EMU STATUS

\*CONSUMABLE LEVELS \*OXYGEN LEVELS \*NITROGEN LEVELS \*WATER LEVEL \*BATTERY CHARGE \*CONTAMINATION LEVELS

\*FAULTS

\*MAINTENANCE NEEDS

\*MMU STATUS

\*CONSUMABLE LEVELS \*PROPELLANT LEVEL \*BATTERY CHARGE

\*COOLANT

\*CONTAMINATION LEVELS

\*FAULTS

\*MAINTENANCE NEEDS

\*AIRLOCK STATUS

\*AIRLOCK MODE

\*AIR COMPOSITION

\*AIR PRESSURE

\*AIR TEMPERATURE

\*ATR HUMIDITY

\*CONTAMINATION LEVELS \*MAINTENANCE NEEDS

## EUNCTIONAL DESCRIPTION

253 GN & C STATUS

CONTAINS CURRENT DATA ON THE STATUS OF MODES AND FUNCTIONS OF GN & C EQUIPMENT.

\*GN & C STATUS

\*GN & C MODE

\*ATTITUDE SENSOR STATUS

\*STAR TRACKER STATUS

\*RCS STATUS

\*ATTITUDE CONTROL STATUS

\*CMG STATUS

\*CMG STATUS

\*FLEXIBLE BODY MCDE SENSOR STATUS

\*MAGNETIC TORQUE STATUS

\*POINTING MOUNT STATUS

254 C & T STATUS

CONTAINS CURRENT DATA ON COMMUNICATION AND TRACK-ING SYSTEM EQUIPMENT MODES AND FUNCTIONING. \*COMMUNICATION MONITOR (241) \*TRACKING STATUS \*TRACKING MODE \*LONG RANGE TRACKER STATUS \*PROXIMITY TRACKER STATUS \*TRANSMITTER/RECEIVER STATUS -\*GFS RECEIVER STATUS \*TDRSS TRANSMITTER/RECEIVER STATUS \*MULTIACCESS LINK STATUS \*STATION COMMUNICATION STATUS \*AUDIO SYSTEM STATUS \*VIDEO SYSTEM STATUS \*COMMUNICATION EQUIPMENT STATUS \*MAINTENANCE NEEDS \*EQUIPMENT AVAILABILITY \*CONTROL PARAMETER STATUS

\*MAIN SEQUENCE NEEDS

256 TETHER STATUS

CONTAINS CURRENT STATUS OF TETHER SYSTEM.
\*TETHER STATUS
\*MODE
\*STATE

258 GROUND FACILITY INVENT.

CONTAINS CURRENT INVENTORIES AND RESUPPLY NEEDS

FOR GROUND FACILITIES.

\*GROUND INVENTORIES (1\*-30)

\*MATERIAL LOCATION, STATES

\*RESUPPLY REQUIREMENTS

259 CUSTOMER INVENTORIES

CONTAINS CURRENT INVENTORIES AND RESUPPLY MEEDS FOR CUSTOMER PAYLOADS.

\*CUSTOMER INVENTORIES (1\*-80)

\*MATERIAL LOCATION, STATUS

\*EQUIPMENT LOCATION, STATUS

\*RESUPPLY REQUIREMENTS

25-APR-1985

DSDSTRUCT

DS\_ DS\_NAME

EUNCTIONAL DESCRIPTION

260 STATION INVENTORIES

CONTAINS CURRENT INVENTORIES AND PESUPPLY NEEDS
FOR THE SPACE STATION AND PLATFORM.

\*STATICN INVENTORIES

\*MATERIAL LOCATION, STATUS

\*RESUPPLY NEEDS

\*PLATFORM INVENTORIES(1\*-4)

\*MATERIAL LOCATION, STATUS

\*RESUPPLY NEEDS

# E.2 Data Store Input/Output

The data flows to and from the data stores contents the functions utilizing the data store, and the implications of various physical locations for the data store.

This section shows the data store input and output data flows. The first column shows the number of the function communicating with the data store. Where a 0.0 appears, the communicating element is an external agency. The data store number and name follow. Next is an indicator of whether the data flow is an input to the data store (I) or an output from the data store (O). The data flow diagram number and data flow name follow. When an external agency is involved, its number and name come next. The final entry shows the level of the data flow diagram in which the data flow appears.

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FUNCTION NO		OH		DATA FLOW MANE	THAN STRUM TOSIOS XX	30
	STORA	MODE	NO NO		THE SOURCE STORY	1 101
	GE NO					77
0.0	11 CORE STATUS	H	0.0	FACILITIES STATUS	0010 DATA PROCESSING RESO	
	CORE	0	0.0	CORE DATA		0
3.0	CORE	0	0.0	RESOURCE FORECASTS, CORE SYSTEMS		0
•	CORE	н	0.0	CORE SYSTEMS STATUS		0
	11 CORE DIALOS	0 0				0
		<b>-</b>	- - -	CORE DATA		<b>→</b> (
•	CORE	o c	e c	CORE DAIA		O2 •
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#### E.2P Data Store Input/Output (Platform)

The data flows to and from the data stores contents the functions utilizing the data store, and the implications of various physical locations for the data store.

This section shows the data store input and output data flows. The first column shows the number of the function communicating with the data store. Where a 0.0 appears, the communicating element is an external agency. The data store number and name follow. Next is an indicator of whether the data flow is an input to the data store (I) or an output from the data store (O). The data flow diagram number and data flow name follow. When an external agency is involved, its number and name come next. The final entry shows the level of the data flow diagram in which the data flow appears.

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DATA STORAGE
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CUSTOMER COMMANDS
COMMUNICATION EQUIPMENT STATUS
COMMUNICATION MONITOR
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RECONFIGURATION PROCEDURES
TELEMETRY TABLE
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GM & C STATUS
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#### E.3 External to Process Data Flows

Data flows between external agencies and processes are an indication of the degree of involvement of the external agencies in the operation of the system.

This section shows the data flows between external and processes, organized by external agency. These flows may also be correlated with the input/output data in the functional data base to show amonts of data transferred and interval.

#### The column entries are:

- . Fun. No. The data flow diagram on which the data flow appears
- . Level The data flow diagram level
- . IO Mode Whether the data flow is input to (I) or output from (O) the external
- Ex Source Code number of the external data that some of the names will have alight variations of aliases, identifiable as such by the code number
- . Ex Source Name Name of external source
- . Data Flow Message Name of data flow
- . Process No Source or destination process number
- . Process Name Source or destination process name

				EXSOURCE		D 00 1 1 1
FUN NO LEVEL	HODE		NO N	DATA FLOW HESSAGE	PROCESS NO	PROCESS NAHE
0.0	0	<b>н</b>	1 GUSTOMER/OPERATOR	CORE, PAYLOAD DATA	1.0	MANAGE CUSTONER/OPERATOR
0.0	•	н	1 CUSTOMER/OPERATOR	DISPOSITION	0.0	DELIVERED DATA Manage Customer/Operator
						SUPPLIED DATA
9	<b>5</b>	5	1 COSTONER/OFERATOR	FAYLOAD & CORE COMMANDS, DATA	O.	MAWAGE CUSTOMER/OPERATOR Supplied data
0.0	0	0	CUSTOMER/OPERATOR	SCHEDULE REQUESTS	o. b	SCHEDULE AND EXECUTED
0.0	0		CUSTOMER/OPERATOR	DISPOSITION, SCHEDULES,	3.0	SCHEDULE AND EXECUTE
				₩.	,	OPERATIONS
	<b>.</b>		CUSTOREK/OFERATOR	WINION, ALAKEN	0.0	
	•		COSTONER/OFERSTO	Measure, bibies control	o.	DEVELOF, SIMULATE, INTEGRATE, AND TRAIM
0.0	0	0	CUSTOMER/OPERATOR	PROMPTS, PROCEDURES, I/O,	<b>9</b> .0	DEVELOP, SIMULATE,
			0 + 4 4 4 4 0 / 4 1 0 / 4 1 1 0 / 4 1 1 0 / 4 1 1 0 / 4 1 1 0 / 4 1 1 0 / 4 1 1 0 / 4 1 1 0 / 4 1 1 0 / 4 1 1 0 / 4 1 1 0 / 4 1 1 0 / 4 1	8	•	
	•			PROMPIS, PROCEDURES, 1/0,	0.9	DEVELOP, SIMULATE,
0.0	0	0	CUSTOMER/OPERATOR	MAINTENANCE NEEDS	4.0	SUPPORT SPACE STATION
0.0	0		CORE SYSTEMS	OPERATING COMMANDS	•	PROGRAH Optuatt costtu
	•	0	CORE		0.	
0.0	0	0 10		STATUS	5.0	MANAGE SSDS FACILITIES
0.0	0	101	DATA PROCESSING RESOURCES	年を言む上手書のご言葉	C #	AMD RESOURCES
	,	1				AND RESOURCES
0.0	0	0 13		PAYLOAD DATA	1.0	MANAGE CUSTOMER/OPERATOR
	,		TION ELEMENTS		,	DELIVERED DATA
0.0	5	er -	FAXIOADS AND CONSTELLA-	UNRESTRICTED PAYLOAD	0.	MANAGE CUSTOMER/OPERATOR
0.0	0	1 13		VALID, EXECUTABLE PAYLOAD	0.0	SCHEDULE AND EXECUTE
				COMMANDS	•	-
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2	•	P	COSTORERS AND CONTRACTORS	FROCEDURES, 1/O	0.	DEVELOP, SIMULATE, INTEGRATE AND TRAIN
0.0	0	I 14	CUSTOMERS AND CONTRACTORS	HODELS, DATA	<b>6</b> .0	DEVELOP, SIMULATE,
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	>	Q T	NAKUWAKE AND SOFIWAKE FOR INTEGRATION	SIMULATED STIMULUS	O. <b>9</b>	DEVELOP, SIMULATE, INTEGRATE AND TRAIN
0.0		0 15	_	RESPONSE	<b>6</b> .0	DEVELOP, SIMULATE,
		,				E, AND
0.0	^	1 118	HHIS	SSIS USAGE, LOGISTICS NEEDS	7.0	SUPPORT SPACE STATION
1.0		G .	ONBOARD CUSTOMER/OPERATOR	OPERATING DATA	1.1	HANAGE REALTIME DATA
•		•	CHANGE SHOW COMMO		•	1
0.1		<b>8</b>	UNBOARD COSTONER/OFERATOR	VOICE, VIDEO	T . T	MANAGE REALTIME DATA Return
1.0		œ .	ONBOARD CUSTONER/OPERATOR	VOICE, VIDEO	1.1	MANAGE REALTIME DATA
1.0 1		CQ II	ONBOARD CUSTOMER/OPERATOR	CORE, PAYLOAD DELAYED DATA	1.8	KETURM MANAGE DELAYABLE DATA
1.0		0	CORE SYSTEMS	CORE REALTIME DATA	1.1	RETURN Manage Realtime Data
1	•				,	
1.0	_	087	20 OMV, OTV AND CONSTELLA-	CONSTELLATION REALTIME DATA	1.1	MANAGE REALTIME DATA

PROCESS NAME	RETURN MANAGE REALTIME DATA	RETURN MANAGE DELIVERABLE		CUSTOMER DATA MAWAGE DELIVERABLE	CUSTOMER DATA MANAGE DELIVERABLE	CUSTOMER DATA		DATA	MAKAGE DELIVERABLE CORE	MANAGE DELIVERABLE CORE	MANAGE DELIVERABLE CORE		ACQUIRE REALTIME DATA	REALTIME	REALTIME		CAPTIES REALITME DAILS		CAPTURE DELAYED PAYLOAD		AND	CUSTOMER DATA INTERFACE	HAWAGEHENT	CUSTOMER DATA INTERFACE	CHRICKIE DATA MANDITES		DATA	SSIS ROUTING AND	HRAMONIONION	MISSION	SSIS ROUTING AND	SKIN ROUTING AND	MISSION	SSIS ROUTING AND	DISPLAYS AND CONTROLS	DISPLAYS AND CONTROL	AND
PROCESS NO	1.1	1.4	1.4	1.4	1.4	7		) •		<b>5</b> 0 . rd	1.5	•	1.1.1	4		-		! !	1.8.1	:	0 F	. <del>.</del>		1.4.1	1.4.3		1.4.6	1.4.7	1.4.7		1.4.7	1.4.7		1.4.7	1.5.4	4.8.4	1.8.1
DATA FLOW MESSAGE	PAYLOAD REALTIME DATA	CUSTOMER VOICE, VIDEO COMM.	PAYLOAD DATA	CUSTOMER VOICE, VIDEO COMM.	PAYLOAD DATA	ADDITIONAL ANCILLARY DATA	ATAC T		COKE DATA	OPERATOR VOICE, VIDEO COMM.	OPERATOR VOICE, VIDEO COMM.	CHELO	VOICE, VIDEO	CORE REALTIME DATA	CONSTELLATION REALTIME DATA	PAVIOAD BFAITING DATA	LATION DET	PAYLOAD DATA	STATION DELAYABLE PAYLOAD	DATA VOIGE SINES ASSESSED	VIDEO			OWSITE CUSTOMER VOICE, VIDEO	CUSTOMER BULK. REALTIME DATA	DATA ACCOUNT	PURGE, RETRIEVE REQUESTS	OFFSITE CUSTOMER VOICE, VIDEO	OFFSITE CUSTONER VOICE VIDEO		CUSTOMER DATA	OFFSITE CUSTOMER VOICE, VIDEO		OFFSITE CUSTOMER VOICE, VIDEO	OPERATOR VOICE, VIDEO	COMMUNICATION CORE DISPLAYS	
EX SOURCE EX SOURCE MAHE	TION INTERFACES 33 SPACE STATION PAYLOADS	27 GROUND CUSTOMERS	27 GROUND CUSTOMERS	27 GROUND CUSTONERS	28 CUSTOMER RDC'S (NOM-SSDS	SOIN/SCN) 30 ENGINEERING DATA CENTER	ENGINEERING DATA		SS GROOME OFFICES	33 GROUND OPERATORS	33 GROUND OPERATORS	S OFFICE CRECATOR	-	CORE	20 OHV, OTV AND CONSTELLA-	SI SPACE STATION PAYLOADS	OMV. OTV AND C	TION INTERFACES	23 SPACE STATION PAYLOADS	SANTICE A SETTING BEOLD FOL	CREW FAMILIES &	CUSTOMER		106 CUSTONER	106 CUSTOMER	106 CUSTOMER		867 RDC OPERATOR	267 RDC OPERATOR		877 OFFSITE CUSTOMER	277 OFFSITE CUSTOMER		277 OFFSITE CUSTOMER	102 OPERATOR	102 OPERATORS	
HODE	0	0	H	H	Ħ	0	H	•	•	0	н	-	0	0	0	0	0		0	۰	0	0	٠	<b>→</b>	H	H	0	•	H		<b>H</b>	H	1	0	-	H	•
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1   1   1   1   1   1   1   1   1   1			ò				OPERATION
1   1   20   00   00   00   00   00	e.		ă.	OMV,OTV,AND CONS INTERFACES	VALID PAYLOAD DATA	t. ca	VALIDATE PAYLOAD COMMANDS
1   1   20 ONV.OTY AND CONSTITATION OUTSIDE DATA   20.0 ONV.OTY AND CONSTITUON OUTSIDE DATA   20.0 ONV.OTY AND OUTSIDE DATA   20.0 ONV.OTY AND OUTSIDE DATA   20.0 ONV.OTY AND OUTSIDED DATA   20.0 ONV.OTY AND OUTSIDE DATA   20.0 ONV.OTY AND OUTSIDED DATA   20.0 ONV.OTY AND OUTSIDE DATA   20.0 ONV.OTY AND OUTSIDED DATA   20.0 ONV.OTY AND OUTSIDE DATA   20.0 ONV.OTY AND OUTSIDED DATA   20.0 ONV.OTY AND OUTSIDE DATA   20.0 ONV.OTY AND OUTSIDED DATA   20	0.		ă	OMV, OTV, AND CONS	VALID, HOM-RESTRICTED PAYLOAD	GE CE	CHECK COMMAND RESTRICTION
1   0   00   00   00   00   00   00			8	INTERFACES OMV, OTV AND CONS	COMMANDS Ancillary data	<b>€</b>	/CONSTRAINT PROVIDE AMCILLARY DATA
1   1   20 ONY.OTY AND CONSTELLATION OPERATION COMMANDS DATA   2.5			38	INTERFACES OMV, OTV AND CONS	CUSTONER SYSTEM OPERATIONS	80	a ENC FOIL
1   0   0   0   0   0   0   0   0   0	ı			INTERFACES	DATA	) i	OBTOHER
1   0   80 ONV.OTY DE CONSTELLATION   SSPE STATUS   2.6     1   1   23 SPACE STATION PAYLOADS   VALID PAYLOAD DATA   2.1     1   1   23 SPACE STATION PAYLOADS   VALID REALITHE COHMANDS   2.5     1   1   23 SPACE STATION PAYLOADS   AMCILLANY DATA   2.4     1   1   23 SPACE STATION PAYLOADS   AMCILLANY DATA   2.4     1   1   23 SPACE STATION PAYLOADS   DATA   DATA   2.5     1   1   24 SPACE STATION PAYLOADS   DATA   DATA   2.5     1   1   24 SPACE STATION PAYLOADS   AMCILLANY DATA   2.4     1   1   25 CORE OPERATOR   SSPE DIAGNOSES   2.5     1   1   1   1   1   1   1   1   1	o,		ă	OMV,OTV AND CONS INTERFACES	OPERATION COMMANDS DATA	er.	USTOMER
1   1   23 SPACE STATION PAYLOADS   VALID PAYLOAD DATA   2.1   1   23 SPACE STATION PAYLOADS   VALID REALTIME COHMANDS   2.2   1   1   23 SPACE STATION PAYLOADS   PAYLOAD OPERATING COHMANDS   2.5   1   1   25 CORE STATION PAYLOADS   DATA   DATA			8	OMV, OTV AND CONS	SSPE STATUS	8. G	E CHECKOUT AND
1   1   23 SPACE STATION PAYLOADS   NALID REALITHE COHMANDS   2.4   1   1   23 SPACE STATION PAYLOADS   PAYLOAD OFFERATING COHMANDS   2.4   1   0   23 SPACE STATION PAYLOADS   PAYLOAD OFFERATING COHMANDS   2.5   1   0   23 SPACE STATION PAYLOADS   DATA   CUSTOMER SYSTEM OFFERATIONS   2.5   1   1   102 OFFERATOR   SAPE DIAGNOSES   2.6   1   0   102 OFFERATOR   SAPE DIAGNOSES   2.5   1   1   102 OFFERATOR   SAPE DIAGNOSES   2.1   1   1   103 OFFERATOR   SAPE DIAGNOSES   2.1   2   1   104 OFFERATOR   SAPE STATION   SAPE DIAGNOSES   2.1   3   1   104 OFFERATOR   SAPE STATION   SAPE STAT			æ	SPACE STATION PA	VALID PAYLOAD DATA	6.3	ING VALIDATE PAVIDAD COMMANDS
1   1   22 SPACE STATION PAYLOADS   AMCILIARY DATA   2.4   PROVINCE			Č			• •	/DATA
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1   1   23 SPACE STATION PAYLOADS   DATA			<b>03</b>	SPACE STATION	ANCILLARY DATA	<b>4.</b> 68	ANCILLARY
1   0   23 SPACE STATION PAYLOADS   CUSTOMER SYSTEM OPERATIONS   2.5 CORE OPERATOR   DATA			Q.	SPACE STATION	OAD OPERATING	20.	USTOMER
1   1   22   CORE OPERATOR   DATA			Oğ.	SPACE STATION	CUSTOMER SYSTEM OPERATIONS	œ.	USTOHER
1   108 OFERATOR   DISPOSITION   2.3   VALIDATE   DATA			13 93			ø.	KOUT AND
1   0   100 OPERATOR   CORE COHMANDS   DATA   B.53   VALIDATE			act				
1   0   106 CUSTOHERS			108		CORE COMMANDS/DATA	n en	CORE
1   106 CUSTOMERS			•			) :	wite cont
I   I   106 CUSTOHERS   DISPOSITION   8.1   VALIDATE			106	CUSTOMERS	CLE	1.0	
B         I         102 OPERATOR         DISPOSITION         8.3.1           B         0         102 OPERATOR         OPERATOR         CORE COMMANDS/DATA         8.3.1           B         1         102 OPERATOR         COREATOR         CORE COMMANDS/DATA         8.3.8           B         1         CUSTOMERS/OPERATORS         (SEE 2.0 FOR COMMAND PATH)         8.8           B         1         CUSTOMERS/OPERATORS         PROCESSED PAYLOAD DATA         8.5.1           B         1         CUSTOMERS/OPERATORS         OTV PAYLOAD STATUS         8.5.3           B         1         CUSTOMERS/OPERATORS         OTV PAYLOAD STATUS         8.5.3           B         1         CUSTOMERS/OPERATORS         PAYLOAD DIAGNOSTICS         8.5.4           B         1         CUSTOMERS/OPERATORS         PAYLOAD DIAGNOSTICS         8.5.5           B         1         CUSTOMERS/OPERATORS         PAYLOAD DIAGNOSTICS         8.5.1           B         1         CUSTOMERS/OPERATORS         PAYLOAD DIAGNOSTICS         8.5.1           B         1         ASS SPACE STATION PAYLOADS         STATION PAYLOAD OPERATING         8.5.1           B         1         ASS SPACE STATION PAYLOADS         EXECUTABLE CONSTELLATION         8.5.2			106	CUSTOMERS	MOILISOASIQ	8.1	
CONTINUE OF CONTINUE							
2         102         OPERATOR         CORE         COMBANDS/DATA         R.3.1           2         1         1 CUSTOHERS/OPERATORS         (SEE 2.0 FOR COMMAND PATH)         8.3.8           2         1         CUSTOHERS/OPERATORS         PROCESSED PAYLOAD DATA         8.3.3           2         1         CUSTOHERS/OPERATORS         OTV PAYLOAD STATUS         8.5.4           2         1         CUSTOHERS/OPERATORS         OHV. PAYLOAD STATUS         8.5.4           2         1         CUSTOHERS/OPERATORS         PAYLOAD DIAGNOSTICS         8.5.4           2         1         CUSTOHERS/OPERATORS         PAYLOAD DIAGNOSTICS         8.5.4           3         1         CUSTOHERS/OPERATORS         PAYLOAD DIAGNOSTICS         8.5.4           3         1         CUSTOHERS/OPERATORS         PAYLOAD DIAGNOSTICS         8.5.1           4         1         CUSTOHERS/OPERATORS         PAYLOAD DIAGNOSTICS         8.5.1           5         1         ASS SPACE STATION PAYLOADS         PATA         ASS SPACE STATION PAYLOADS         EXECUTABLE CONSTELLATION         2.5.2			200	OFERATOR	DISPOSITION		
2         I         102 OFERATOR         DISPOSITION         8.3.8           2         1         CUSTOHERS/OPERATORS         (SEE 2.0 FOR COMMAND PATH)         8.3.8           2         1         CUSTOHERS/OPERATORS         PROCESSED PAYLOAD DATA         8.5.1           2         1         CUSTOHERS/OPERATORS         OTV PAYLOAD STATUS         8.5.4           2         1         CUSTOHERS/OPERATORS         PAYLOAD STATUS         8.5.4           2         1         CUSTOHERS/OPERATORS         PAYLOAD DIAGNOSTICS         8.5.4           2         1         CUSTOHERS/OPERATORS         PAYLOAD DIAGNOSTICS         8.5.1           2         1         CUSTOHERS/OPERATORS         PAYLOAD DIAGNOSTICS         8.5.1           2         1         CUSTOHERS/OPERATORS         PAYLOAD DIAGNOSTICS         8.5.1           2         1         ASS SPACE STATION PAYLOADS         PATA         ASS SPACE STATION PAYLOADS         EXECUTABLE CONSTELLATION         2.5.2	-		102	OPERATOR	CORE COMMANDS/DATA	. a . a	
2 I CUSTOHERS/OPERATORS (SEE 2.0 FOR COMMAND PAIH) 8.8 2 I CUSTOHERS/OPERATORS PROCESSED PAYLOAD DATA 2.5.1 2 I CUSTOHERS/OPERATORS ONV. PAYLOAD STATUS 2.5.3 3 I CUSTOHERS/OPERATORS ONV. PAYLOAD STATUS 2.5.4 3 I CUSTOHERS/OPERATORS PROCESSED STATUS 2.5.4 4 I CUSTOHERS/OPERATOR PAYLOADS PROCESSED STATION, PAYLOAD 2.5.1 4 DATA DATA 2.5.1 5 AS SPACE STATION PAYLOADS EXECUTABLE CONSTELLATION 2.5.2			102	OPERATOR	DISPOSITION	2 CE	
2     I     1 CUSTOMERS/OPERATORS     PROCESSED PAYLOAD DATA     2.5.1       2     I     1 CUSTOMERS/OPERATORS     OTV PAYLOAD STATUS     2.5.3       2     I     1 CUSTOMERS/OPERATORS     PAYLOAD STATUS     2.5.4       2     I     CUSTOMERS/OPERATOR     PAYLOAD STATUS     2.5.4       2     I     CUSTOMERS/OPERATOR     PAYLOAD STATUS     2.5.5       3     I     CUSTOMERS/OPERATOR     PAYLOAD STATION PAYLOADS     2.5.1       4     I     CUSTOMERS/OPERATOR     2.5.1       5     I     CUSTOMERS/OPERATOR     2.5.1       6     I     CUSTOMERS/OPERATOR     2.5.1       6     I     CUSTOMERS/OPERATOR     2.5.2       7     DATA     DATA     2.5.2       8     I     2.5 SPACE STATION PAYLOADS     EXECUTABLE CONSTELLATION     2.5.2			-	CUSTOMERS/OPERATORS	(SEE 8.0 FOR COMMAND PATH)	OZ.	CHECK PAYLOAD COMMAND
2 I CUSTOMERS/OFERATORS OTV PAYLOAD STATUS 2 I CUSTOMERS/OFERATORS ONV, PAYLOAD STATUS 2 I CUSTOMERS/OFERATOR PAYLOAD STATUS 2 I CUSTOMERS/OFERATOR PAYLOAD STATION, PAYLOAD STATION PAYLOADS EXECUTABLE CONSTELLATION 2.5.2		н	•	CUSTOMERS/OPERATORS	PROCESSED PAVIOAN NATA		RESTRICTION/CONSTRAINT
2 I CUSTOMERS/OPERATORS ONV, PAYLOAD STATUS 25.4 2 I CUSTOMERS/OPERATOR PAYLOAD DIAGNOSTICS 25.5 2 I R3 SPACE STATION PAYLOADS PROCESSED STATION, PAYLOAD 2.5.1 2 O R3 SPACE STATION PAYLOADS STATION PAYLOAD OPERATING 2.5.1 2 DATA 2 S SPACE STATION PAYLOADS EXECUTABLE CONSTELLATION 2.5.2	ın	H	<b>-</b>	CUSTOMERS/OPERATORS	OTV PAYLOAD STATUS		SUPPORT OTV OPERATIONS
A I CUSTOMERS/OPERATOR PAYLOADS DIAGNOSTICS 8.5.5  R I R3 SPACE STATION PAYLOADS PROCESSED STATION, PAYLOAD 8.5.1  DATA  R O R3 SPACE STATION PAYLOADS STATION PAYLOAD OPERATING 8.5.1  DATA  DATA  B I R3 SPACE STATION PAYLOADS EXECUTABLE CONSTELLATION 8.5.2	10	<b>+</b>	-	CUSTOMERS/OPERATORS		20.03.	SUPPORT OMV OPERATIONS
A STACE STATION PAYLOADS PROCESSED STATION, PAYLOAD 2.5.1 CUSTONER DATA  R O 23 SPACE STATION PAYLOADS STATION PAYLOAD OPERATING 2.5.1 CUSTONER DATA  DATA  R I 23 SPACE STATION PAYLOADS EXECUTABLE CONSTELLATION 2.5.2 CUSTONER PAYLOADS	In	<b>H</b>	-	CUSTOMERS/OPERATOR	PAYLOAD DIAGNOSTICS	ю	CUSTOMER PAYLOAD CHECKOUT
A STACE STATION PAYLOADS STACE STATION PAYLOAD OPERATING 8.5.1 CUSTOMER DATA  DATA  R I STATION PAYLOADS EXECUTABLE CONSTELLATION 8.5.2 CUSTOMER PAYLOA	ស		283	SPACE STATION PAYLOADS	ESSED	ĸ,	CUSTONER DATA PROCESSING
23 SPACE STATION PAYLOADS EXECUTABLE CONSTELLATION 2.5.2	<b>80</b>		es Es	SPACE STATION PAYLOADS	DAIA PARION PAYLOAD OPERATING	EO.	CUSTOMER DATA PROCESSING
		H	83	SPACE STATION PAYLOADS	DAIA EXECUTABLE CONSTELLATION	83. 83.	CUSTOMER PAYLOAD

PROCESS WAHE	OPERATIONS CUSTONER PAYLOAD CHECKOUT	/SERVICING SUPPORT OTV OPERATIONS	SUPPORT OTV INTERFACE	SUPPORT OHV OPERATIONS	SUPPORT OHV OPERATIONS	CUSTOHER DATA PROCESSING	CUSTOMER DATA PROCESSING	CUSTOMER PAYLOAD	CILCULATIONS CHECKOUT	ACQUIRE REALTIME DATA CHECK PAYLOAD COMMAND	RESTRICTION/CONSTRAINT	CHECK PAYLOAD COMMAND	RESTRICTION/CONSTRAINT OTU DEPLOVMENT BETRIEUAT		OTV DEPLOYMENT RETRIEVAL	OTV OPERATION	OTV STATUS REPORT	OTV SERVICING		OIV CAECKOUI/DIAGNOSTICS		OIV SERVICING	OTV CHECKOUT/DIAGNOSTICS		ORV DEFLOYMENT RETRIEVAL		OTE OPERATIONS			ONV SUBVICING	ONV CHECKOUT/DIAGNOSTICS	63	RESTRICTED/CONSTELLATION	OHV DEPLOYMENT/RETRIEVAL
PROCESS NO	65 103 103	es es es	85 85 85	4.0.0	4.6.4	1.5.6	80.05 L	es es es	8. 10.	1.1.1	60 60 60 60 60 60 60 60 60 60 60 60 60 6	)	61 62 63 63 64 64		8. w. w.	4.8.8.4	8.5.3.5	20.5.3.1		0 to 10 to 1		2.5.3.1	8.5.0 8.0.0	1.1.1		5.4	2.5.4.4		n ı	as a 4. 4. 1. a	e 4	i CE	•	6
DATA FLOW MESSAGE	PAYLOAD COMMANDS PAYLOAD STATUS	OTV STATUS	OTV COMMAND	OHV STATUS	ому соннай	PROCESSED CONSTELLATION PAYLOR DAYLORD	CONSTELLATION PAYLOAD OPERATING DATA	EXECUTABLE CONSTELLATION PAYLOADS	CONSTELLATION STATUS	CONTROL HANDOFF COORDINATION OTV CONTROL REQUESTS	STATE, COURSE PROJECTIONS	R	RETURN TARGETING		COORSE CORRECTION	FAYLOAD, OTV COMMAND	OTV, PAYLOAD SIGNALS	VOLTAGE, CURRENT, TEMPERATURE	, PRESSURE, LEVELS DIACHOSTIC DATA	LAUNCH TARGETING				COMINCE RAMBORE COORDINATION NTATE COMMENTATION	MANEUVER	CONTROL	HAMIPULATOR STATE			BERVICE DATA DIAGNOSTIC DATA	LAURCH TARGETING	PAYLOAD CHECKOUT COMMANDS	#2185#8802 #88170	COURSE CORRECTION
EX SOURCE EX SOURCE NAME	83 SPACE STATION PAYLOADS	144 OTV COMMUNICATION INTER- FACE	144 OTV COMMUNICATION INTER- FACE	154 OMV COMMUNICATION INTER- FACE	154 OHV COMMUNICATION INTER- FACE	170 COMSTELLATION INTERFACE	170 CONSTELLATION INTERFACE	170 CONSTELLATION INTERFACE	170 CONSTELLATION INTERFACE	108 OPERATOR 108 OPERATOR	108 OPERATOR	144 OTV COMMUNICATION	INTERFACE 144 OTV COMMUNICATION	INTERFACE		144 OIV COMMUNICATION INTERFACE	144 OTV COMMUNICATION	146 OIV BERTH	146 OTV BERTH	46		SE :	159 EVA CREW		-			•	148 CHAKGEK 150 ONO HEBHU	) E O	52 OMV	154 OMV COMMUNICATION INTER-	FACE	FACE
HODE NO	٥	0	<b>H</b>	0	<b>H</b>	<b>H</b>	0	н	0	00	н	<b>H</b>	-	-	•	н	0	0	o	<b>H</b>	H	н,	۰ ،	) H	0	0	н,	<b>-</b> -	<b>→</b> C	0	) н	H	•	•
IEVEL	æ	CQ2	CS.	CQ.	œ	CE .	œ	Œ	CQ2	n n	ຄ	ю	ຄ	15		ຄ	ຕ	n	n	8	<b>13</b>	19 E	2 5	) to	n	<b>8</b> 3	හ <b>:</b>	n #	9 K		n	10	ĸ	<b>;</b>
FUN NO	os no	es:	05 RD	es no	ci in	es ro	05 RD	os no	α; κο	0. 0. 0. 0. 0. 0.	•	8. 8. E	ກ ໝ ແ -41	17 17 01	:	ය ක ස	8. 8. 5.	e. e	8. 8.	10	100		28 00 0 18 0 4	'n	10		ı,	æ. e	0 10		8	20.55. <b>4</b>	0) E	•

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Page 6	PROCESS NAME	OHV DEPLOYMENT/RETRIEVAL	REHOTE OPERATIONS CONTROL	OMV OPERATION	OHV STATUS REPORT	OHV CHECKOUT/DIAGNOSTICS	DEVELOP RECURRING OPERATIONS MASTERS		DEVELOP SHORT TERM	SCHEDULES DEVELOP SHORT TERM		DEVELOP SHORT TERM SCHEDIITES	SEQUENCE OPERATIONS	DEVELOP SHORT TERM	DEVELOP SHORT TERM	SCHEDULES RECURRING OPERATIONS		DEVELOF MORMAL DAY CORE SYSTEM OPFRATIONS	DEVELOP HODE	COMPATIBILITY MATRIX DEVELOP MODE	COMPATIBILITY MATRIX	DEVELOP MAJOR EVENT	DEVELOP NORMAL DAY	PAYLOAD OPERATIONS	COMPATIBILITY MATRIX	DEVELOP MODE COMPATIBILITY MATRIX		OPERATIONS	DEVELOP MAJOR EVENT OPERATIONS	INCORPERATE NEW/REVISED	OPERATIONS RESOLVE CONFLICTS		KENOLVE CONFLICTS CONFIRM PAYLOAD AND CORE	SCHEDULES CONFIRM PAYLOAD AND CORE SCHEDULES
	PROCESS NO	8. €. 8. 8	4.4.6	8. 4. 80.	8.5.4.6	6. 4. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6.	3.1	3.1	a. b	e.	,	es es	a. <b>♣</b>	ю 8	a.	3.1	(	32. T. O	3.1.3	3.1.3		3.1.4	3.1.1	£.	)	3.1.3	3.1.4	•	# · T · 6	3.8.8	3.8.5	0 6		3.8.1
EXSOURCE	DATA FLOW HESSAGE	RETURN TARGETING	HANIPULATOR COMMANDS	ОНУ СОМНАИВ	OHV, PAYLOAD STATUS	OHV MAINTENANCE ACTIONS	OFFICATIONS CHARACIERISTICS	APPARENT COMPLICTS, POSSIBLE RESOLUTIONS	SCHEDULE CONFIRMATION CHANGE	REQUESTS SCHEDULE CONFIRMATION CHANGE		RESOURCE AVAIL., UTILIZ., INTER FERENCES POSSIBLE RESOLUTION	VALID, EXECUTABLE PAYLOAD	COMMUNICATION SCHEDULE	COMMUNICATION NEEDS	NSTS SCHEDULES, MANIFESTS	1100 E		CONFIRMED RESTRICTIONS,	CONSTRAINTS POTENTIAL CONFLICTS, DETAILS		MAJOR EVENT SPACE STATION OPERATIONS CHARACTERISTICS	PAYLOAD OFERATIONS CHARACTER-	ISTICS CONFIRMED RESTRICTIONS/	CONSTRAINTS	FOIENITAL COMPLICIS, DETAILS	MAJOR EVENT PAYLOAD		sols scaeboles, manifests	NEW CORE OPERATIONS	RESOURCE AVAIL, UTILIZ., INTER	-FERENCES POSSIBLE RESOLUTION BECOLUTION	COMMUNICATIONS NEEDS	COMMUNICATION SCHEDULES
	EX SOURCE EX SOURCE MAHE  NO	I 154 ONV COMMUNICATION INTER- FACE	I 154 OHV COMMUNICATION INTER-	154	154	159	T COBIOTENS OF TWAT	CUSTOMER/OPERATOR	CUSTOMERS/OPERATORS	) 1 CUSTOMERS/OPERATORS		1 COSTORER/OFERSION	83 PAYLOADS, OTV, OMV CONS-	92 NETWORK CO	92 NETWORK CONTROL	ASO NSTS HISSION CONTROL	act variation	1	102 OPERATOR	102 OPERATOR		102 OPERATOR	106 CUSTOMER	106 CUSTOMER	•	TOO COSTOURN	106 CUSTOMER	TORFACE MOLUGIN SESS ONO		33 GROUND OPERATOR	33 GROUND OPERATOR	an canilar can	~	92 NETWORK CONTROL
	HODE	-	<b>H</b>	H	0	н с	•	H	H	0	٠	4	H	0	H	0	c	)	0	H	(	0	0	0	•	•	0	c	•	0	H	C	<b>H</b>	•
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21 -JUL-1985	FUN NO	8.5.4	es €.	æ.	æ. æ.	0; E 10; €	) :	0. 0.	0.0	3.0		;	3.0	3.0	0.0 0.0	o n E-42		! : ;	3.1	3.1	·	1.6	3.1	3.1			3.1		4 •	es es	ы а	es es	 	ຄ ຜ.

PROCESS WAME	CONFIRM PAYLOAD AND CORE	CONFIRM PAYLOAD AND CORE	SCHEDULES CONFIRM PAVIOAD AND CORF		CONFIRM PAYLOAD AND CORE	INCORPERATE NEW/REVISED	RESOLVE CONFLICTS			RESOLVE CONFLICTS PEROTUS CONFLICTS	-	MODE CHANGES	ADJUST FOR UNSCHEDULED	SEDITERCE PAVION	OPERATIONS	SEQUENCE PAYLOAD	OPERATIONS	COMMAND SCHEDULED MODE	OPERATE GN & C SYSTEM	CUSTOME	SERVICES BEOLITE CHESCHES AND		SUPPORT FLIGHT CREW	ACTIVITIES	SUPPORT FLIGHT CREW	MONITON AND REALIS		MONITOR AND STATUS		SYSTEM	OPERATE NON-GN & C CORE	SYSTEM ON D COSTEM			GUIDANCE	TRAFFIC CONTROL		-	ATTITUDE CONTROL	$\boldsymbol{\alpha}$	ATTITUDE CONTROL	NAVIGATION	TIME AND FREQUENCY
PROCESS NO	1.8.1	3.8.1	0. 1.0	! ! : !		а. а.	83.83 80.03		13 (1 05 (1 10 (1		a. w. ♣		<b>4</b> .0.4	3.4.1		3.4.1	,	n	4.1	4.4	•		<b>4</b> .a		<b>↓</b>	<b>1</b> 0	) 	<b>4</b> .0	•	e •	<b>♣</b> .	4.1	4.1	4.1.8	4.1.8	4.1.4	4.1.4	4.1.3	4.1.3	4.1.1	4.1.3	4.1.1	4.1.6
DAIA FLOW HESSAGE	BASELINE SCHEDULES	SCHEDULE CONFIRMINATION,	CORE CHANGE REQUESTS BASELINE SCHEDULES		PAYLOAD CHANGE REQUEST	NEW PAYLOAD OPERATIONS	RESOURCE, AVAIL UTILIZ. ,	IMTERFER., POSSIBLE RESOLUTIONS	CHES ACHTUTES ACCUMENTATION	CREW PREFERENCES	HOTICE OF UNSCHEDULED HODE	CHANGES	WOTICE OF UMSCHEDULED MODE CHANGES	VALID, EXECUTABLE ONV. OTV.	ISTELLATION COMMANDS	VALID, EXECUTABLE STATION	PAYLOAD COMMANDS	CONTROLLED BIBIER HOUE CHANGE	CORE AVIONICS DATA	AVIONICS SERVICES REQUESTS	AVIONICS SERVICES		MESSAGES, PROCEDURES,		CREW DATA REQUESTS, TASK SFIECTIONS	CORE SYSTEM STATUS. ALARMS		CUSTOMER ALARMS, SYSTEM	MOMENTS CONTRACTOR CONTRACTOR	•	SENSOR DATA	GN & C OPERATING COMMANDS		MANEUVER PLAN	COLLISION AVOIDANCE	MANEUVER CHANGE	COLLISION WARNING	TORQUE COMMAND			е	POSITION, RATE	TIME, FREQUENCY REFERENCE
URCE EX SOURCE NAME	102 OPERATOR	102 OPERATOR	106 CUSTOMER	##NC#8117 90 C		106 CUSTOMER	106 CUSTONER		110 COBLUMER	_	102 OPERATOR		106 CUSTOMER	20 OHV, OTV, AND CONSTELLA-	TIOM INTERFACES	23 SPACE STATION PAYLOADS			3 PAYLOADS, CONST.	13 PAYLOADS, CONST. ELEMENTS	13 PAYLOADS. CONSTELLATION	ELEMENTS	102 OPERATOR		108 OFERATOR	102 OPERATOR		106 CUSTONER	MALNAS ES S S S S S S S S S S S S S S S S S		201 NON-GN & C CORE SYSTEM	ROB GN & C SYSTEM	202 GW & C SYSTEM	102 OPERATOR		102 OPERATOR	02 OPERATOR	CONTROL MOMENT G	REACT	65 RATE	RATE	G GPS	166 GFS TRACKER
I O EX SOURCE HODE NO	<b>H</b>	Ο.		c	•	0		ć	<b>&gt;</b> +	0	H	•	<b>+</b>	H		н	-	•	<b>H</b> (	0	<b>H</b>		H	•	<b>5</b>	H	ı	H	н		0	H		H			<b>H</b>			0 (	0 (	0 0	<b>.</b>
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FUN NO	ss es	es es	8. 83	a F	•	ນ ຜ	ы a.	o r	9 60		ນ ນ		o. o	<b>4</b> .b		<b>4</b> .	N.		0 -43	o.	4.0		€.0	•	) •	•••	,	<b>⊙</b>	0.4	,	o. <b>+</b>	€.0	<b>4</b> .0	4.1	<b>4</b> .1	4.1	4.1	<b>4</b> .1	<b>.</b>			 	7.#

PROCESS NAME	MANAGEMENT TIME AND FREQUENCY	HAHAGEMENT Tracking	TRACKING	13			ATTITUDE DETERMINATION SPACECOART STATE/OPDIT	DETERMINATION	SPACECRAFT STATE/ORBIT	DETERMINATION	ATTITUDE DETERMINATION	COLLEGE DELENGISMICS	COLLISION CHECK	TETHER CONTROL	MIRC	ATTITUDE AND TRANSLATION	CONTROL GENERATE ATTITUDE		GENERATE ATTITUDE COMMANDS	GENERATE ATTITUDE	COMMANDS Churubary Affician		ATTITUDE AND TRANSLATION	CONTROL SOURS COURSOL	HOOM	AND IF	COMPROIL ABBINGS		GENERATE ATTITUDE	COMMANDS TARGET COLLISION AVOID-	TARGET COLLISION AVOID-	ANCE MANAGE CONSTELLATION	Œ		UNTING	LONG RANGE OBJECT TRACK- TWG	LONG RANGE OBJECT	TRACKING TRACKING DATA CONDITION-	ING Proxhity tracking
PROCESS NO	4.1.8	4.1.5		•		6.1.3	4.1.1.4		4.1.1.1		<b>4</b> .1.1. <b>4</b>	1	4.1.8.3	4.1.8.5	•	4.1.3.1	4.1.3.8	1	4.1.0	4.1.3.8	9	: :	4.1.3.1	4 5 6 4		4.1.3.1		•	4.1.3.8	4.1.4.5	4.1.4.8	4.1.4.8		4.1.4.4	#.1.5.0	4.1.5.1	4.1.5.1	4.1.5.4	4.1.5.2
DATA FLOW MESSAGE	TIME, FREQUENCY UPDATES		MODE, DIRECTION	RANGE, RATE DIRECTION	CO-FILE SAMEOVER CONTAIN	ATTITUT TROUBLES	POSITION RATE		SECOND SOURCE MAVIGATION		STAN BOTHTHE COCKLINATES	ISION AVOI	MANEUVER PLAN			HODES, AMPLITUDES	TORQUE COMMAND		CHG SIAIUS	THRUSTER FIRING COMMANDS	RUS STATUS		ATTITUDE INCREMENTS	POINTING COMMAND	GIMBAL POSITION	HAGNETIC FIELD	TOROTT CONHAME		TORQUER STATUS	MANEUVER CHANGE	COLLISION WARNING	COFLIER MANEUVER COMMAND		COFLIER HAMEUVER COMMAND	UBJECT STATE, ORBIT	IKACKING SIATUS	SEARCH, POINTING REQUIREMENTS	TRACKING DATA	TRACKING STATUS
EX SOURCE EX SOURCE WANE	167 TIME, FREQUENCY SOURCES	MORAD	TRACKING SENSO	169 TRACKING SEMSORS	NOT THE TORON	RATE GVBOS	GPS		178 TDRSS		STAR	OPERA	108 OPERATOR	TETHER	KSTEM	ALW FLEATBLE BOUT HOUR	136 CMG'8	9,575 911	8	138 REACTION CONTROL SYSTEM	138 REACTION CONTROL SYSTEM		165 RATE GYROS	178 POINTING MOUNT	POINTING	261 HAGNETOHETERS	262 MAGNETIC TORONER		262 MAGNETIC TORQUERS	108 OPERATOR	108 OPERATOR	170 CONSTELLATION INTERFACE		170 COMSTELLATION INTERFACE	HOME BANCH HOAD		180 LONG RANGE TRACKER	180 LONG RANGE TRACKER	181 PROKIMITY TRACKER
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N KOA	4.1	4.1	·			4.1.1			<b>4</b> .1.1		٠.	4.1.2	•	٠	4 4 01 F	•	4.1.3		•	5: 1: <del>1</del>	4.1.3		4.1.3	4.1.3	4.1.3	4.1.3	4.1.3		4.1.3	4.1.4	4.1.4	4.1.4		# # # # # # #			4.1.5	4.1.5	4.1.5

PROCESS NAME	PROXIMITY TRACKING TRACKING DATA CONDITION-	ING TIME-BOURCE MANAGEMENT FREQUENCY SOURCE MANAGE-	MENT TIME-SOURCE MANAGEMENT TIME UPDATE	FREQUENCY SOURCE MANAGE-		DEVICE MANAGEMENT OPFRATE THERMAL CONTROL	STRICT THEMSE CONTROL		POWER	OPERATE POWER SYSTEM	ECLES OFERATION	STRUCTURES AND MECHANISM	SUPPORT STRUCTURES AND MECHANISM		STRUCTURES AND MECHANISM	COMMUNICATION RESIDEN			TION	CONFIGURE POWER	DISTRIBUTION WOLFE GOIDT MAKAAAAAA	FOREN SOUNCE DANGEMENT	POWER SOURCE MANAGEMENT	EVALUATE ARRAY PERFORM-	ANCE POWER SOURCE MANAGEMENT	SOURCE	POWER SOURCE MANAGEMENT	POWER SOURCE MANAGEMENT		SOURCE	COMFIGURE POWER DISTRICT	HOIL	COMFIGURE POWER DISTRIBU-	TION ABSTRACT STREET		MANAGE THERMAL LOAD	THERMAL
PROCESS NO	4.1.5.8	4.1.6.1	4.1.6.1	4.1.6.3	4.1.6.4	4.1.6.4	t 0	1	4.8.1	4.8.1		4. 0. 0.	# 01		4. a. a.	4		•	8 · 1 · 8	4.8.1.8		?	4.8.1.3	4.8.1.1	4.8.1.3	4.8.1.3	4.2.1.3	4.8.1.3		4.8.1.8 2.1.8			4.8.1.8	7 . 0 7		4.8.8.1	4.8.8.1
DATA FLOW HESSAGE	POINTING REQUIREMENTS TRACKING DATA	TIME REFERENCE FREQUENCY REFERENCE	TIME REFERENCE TIME, FREQUENCY UPDATES	FREQUENCY REFERENCE		OM, OFF RESET THERMAL CONTROL COMMANDS			CONTROL COMMANDS			R MONITOR	CONTROL COMMANDS		MECHABISM SENSOR, EFFECTOR DATA	HODE, POINT, OPERATION	ICATION	SPARES STATIC ABRODUAT BOLED	0	CONFIGURATION COMMANDS	STATUS ABBORNAL POWER			ARRAY CURRENTS, VOLTAGES	ARRAY CURRENTS, VOLTAGES	SET PC	BUS LOADS, SWITCH STATUS	SOURCE SWITCH POSITION		SIORAGE STATUS, TEMPERATURE STOBAGE OPERATING MODE	-		SWITCH STATUS, LOAD, CURRENTS	, VOLTAGES MODE COMFIRMATION	DEPLOY, RETRACT	ABNORMAL THERMAL CONDITIONS	FIUID TEMPERATURE, PRESSURE,
NO NOTE EX SOURCE NAME	181 PROXIMITY TRACKER 181 PROXIMITY TRACKER	166 GPS TRACKER 166 GPS TRACKER		167 TIME, FREQUENCY SOURCES	TIME, FREQUENCY S	167 IIME, FREQUENCY SOURCES 182 THERMAL CONTROL SYSTEM				185 HOTER SKUTER		185 STRUCTURES SYSTEM	186 MECHANISMS		186 MECHANISMS	842 COMMUNICATION EQUIPMENT	COMMUNICATION EQ	108 OPERATOR		102 OPERATOR	108 OPERATOR		OPERATOR	188 ARRAY REGULATOR SYSTEM	188 ARRAY REGULATOR SYSTEM	ARRAY REGULATOR	189 POWER SOURCE CONFIGURA- TION SWITCH GEAR	R SOURCE	TION SWITCH GEAR	TAC PERFECT STORAGE UNITS	DISTRIBUTION / LOA		191 DISTRIBUTION/LOAD	192 SOLAR ARRAY		102 OPERATOR	224 BUS AND RADIATOR FLUID
HODE	<b>H</b> 0	00	нн	H	0 1	- H	•	ı	н (	<b>o</b> c	<b>H</b>	0	н	•	0	H	0	-	I	0	н	ı	0	•	0	H	0	<b>H</b>	(	э н	H		0	c	н	H	0
LEVEL	ຄຄ	ສສ	nn	ຄ	ស	o oz	Œ		CE C	<b>R</b> 0	e ce	Œ	æ		-	Œ	Œ	E?	)	ຄ	n		<b>13</b>	n	n	B	n	ຄ	t	9 89	(1)		n	173	B	ຕ	ຄ
FUN NO	4.1.5	4.1.6		4.1.6	4.1.6	. 4	<b>4</b> .		œ c		. 4 . 63	<b>₹</b> .8	<b>♣</b>		œ <b>≠</b> E-4!	æ. •	<b>4</b> . 8	4.8.1		4.2.1	. s		4.8.1	<b>4</b> .∞.	4.2.1	•	<b>♣</b> 	4.2.1	•				4.2.1	4.8.1	4.8.1	4.8.8	4.2.2

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PROCESS WANE	DEVICE HANAGEHENT (EXPERT	DMS) Manage Thermal Load	MANAGE THERMAL LOAD	HANAGE THERMAL LOAD	THERMAL DEVICE MANAGEMENT	**************************************			MRH OPERATION	CREASOR/ CREMERING MOVEN		Service State Beat Beat Beat			HECHANISM CONTROL/SAFETY	MRMS OPERATION		MANAGE BERTHING/DOCKING	Services of the services of th	MANAGE BERTHING/DOCKING	CONTROL ATHOSPHERIC	PRESSURE, COMPOSITION	POTABLE WATER MANAGEMENT	POTABLE WATER MANAGEMENT	147117NUM 17711 1771100 1771100 1771100 1771100 1771100 1771100 1771100 1771100 1771100 1771100 1771100 177110	GREY WATER MANAGENENT		GREI WAIER MANAGERENI	CONTROL ATHOSPHERIC	COMPOSITION	PRESSURE COMPOSTION	CONTROL TEMPERATURE	HUMIDITY COMPOCT THEOREM	HUMIDITY	FIRE DETECTION AND	FIRE DETECTION AND	COMTROL ATMOSTITUTE	
PROCESS NO	4. os os	4.8.8.1	4.8.8.1	4.8.8.1	4. 8. 8.	9	'n	4. 05. 05.	4.2.3.2	4 8 8	4.8.3.3 8.5.5	8	4.8.3.1		4.8.3.1	4.8.3.8	4.8.3.8	#. m. u. u	4 6	9 6 6	4.8.4.1		4.8.4.3	4.8.4.3		4.8.4.4	* * * * *		4.8.4.1			4.8.4.8	4		4.2.4.5	4.8.4.5	1 7 0 4	4 
DATA FLOW HESSAGE	AND FLOW RATE EQUIPMENT STATUS	CONTROL PARAMETERS	STATUS AND PERFORMANCE		COUIPHENT STATUS	MECHANISM RECOMPTS:	MECHANISM STATUS	MRMS COMMANDS	POSITION, STATUS, COMMAND	MARRUVER COMMANDS	RELATIVE STATE, ATTITUDE	FKOFAGATION DFTATIUM STATU ATTITUM			STRUCTURES MECHANISHS SENSOR Data	POSITION. STATUS	MRMS CONTROL COMMAND	HAMEUVER COMMANDS (IF	COOPERATIVE) Verified Dock	DOCKTHE BORT CONNANDS	COMPOSITION WARNING		POTABLE WATER SERSOR SYSTEM	POTABLE WATER SYSTEM			COMINATION WARMING	ATION	REVITALIZATION FLOW CONTROL	MOTHINGANON FAITHIO		OUTLET TEMPERATURE	AIR. THERMAT FILLID FLOW		FIRE CONTROL SYSTEM OPERATION	FLAME, SHOKE DETECTION	TOGEROU SOLE MASOGELM MASOAXO	
NO NOUNCE EX SOURCE NAME	LOOPS 284 BUS AND RADIATOR FLUID	225 LUCIS 225 BUS AND RADIATOR FLUID CONTROL	225 BUS AND RADIATOR FLUID	226 PATIOND SIDE INTERFACE	886 PAYLOAD SIDE INTERFACE	HEAT EXCHANGERS 102 OPERATOR	_		102 OPERATOR	108 OPERATOR	108 OPERATOR	181 PROXIMITY TRACKER		SENSORS/EFFECTOR	807 STRUCTURES/MECHANISMS SERSOR/EFFECTORS	208 HRHS		209 OBJECT/COFLIER	BIO DOCKING PORT				102 OPERATOR	102 OPERATOR		108 OPERATOR	102 OPERATOR		145 AIMOSPERIC REVITALIZA-	٠	TION/TEMPERATURE		ATIOM/TEMPERATURE CONTROL 145 ATHOSPHERIC REVITALIZA-	TION/TEMPERATURE	213 FIRE CONTROL SYSTEM	214 FIRE DETECTORS	ATR MAKEIIP	
I O I	0	H	0	0	0	o	H	0	<b>H</b>	0	н	0	н	,	0	0	<b>H</b>	H	0	· H	<b>+</b>	. 1	<b>H</b>	0		н	c	•	H	c	•	0	H		н	0	F	•
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FUN NO	4. 63.	♣ 8. 8.	<b>♣</b> cs cs	<b>4</b> . ∞	4. 63.	4.0		4.8.3	4. 8. 9.	<b>4</b> .8.3	4.8.3	4. 6.		1	<b>4</b> . Ø.	4	£.8.₹	e. a. 4	<b>4</b> .8.8	a	1 CE	,	4.8.4	4.8.4		4.8.4	4.8.4		<b>4</b> .8. <b>4</b>	4.8.4		4.8.4	4.8.4		4.8.4	4.8.4	4	

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PROCESS NAME	CONTROL ATMOSPHERIC	FALSBURE, CORPOSITION POIABLE WATER MANAGEMENT	POTABLE WATER MANAGEMENT	GREY WATER MANAGEMENT	GREY WATER MANAGEMENT	CONTROL TEMPERATURE	CONTROL TEMPERATURE	HUMIDITY	PRESSURE. COMPOSITION		CONTROL ATMOSPHERIC	PRESSURE, COMPOSITION	PRESSURE COMPOSITION	COMMUNICATION EQUIPMENT	COMPRESS THE FORTEST	STATUS MONITORING	SPACE STATION SAFETY	EVA SUPPORT	OPERATIONS AND PROCEDURES	SUPPORT Heateu mathemana	TONUTTUE HEREN	SPACE STATION SAFETY	HABITABILITY	HABITABILITY	HEALTH MAINTENANCE			EVA CIPBORT		æ	PHYSIOLOGICAL DATA TRANS-	M AND ANALY	MEDICAL DIAGNOSTICS SUPPORT	HEDICAL DIAGNOSTICS		CREW PHYSIOLOGICAL	MONITIORING	PHYSIOLOGICAL DATA TRANS- FORMATION AND AMAIVETS	CONI	CESSING CAUTION AND WARNING
PROCESS NO	4.8.4.1	4.8.4.8	4.8.4.3	4.8.4.4	4.8.4.4	4.8.4.8	4.8.4.8	•	4 · # · #	4.8.4.8	4.8.4.1	•	1 · F · 8 · F	4.2.5	4. S. S. S.		4.3.8	4.3.4	♣. a. a			4.3.8	4.3.3	<b>4</b> .0	£.3.1	# · ·	* * * *	4 6	4.8.4	4.3.1.4	4.3.1.6	:	2 · · · · · · · · · · · · · · · · · · ·	4.3.1.8		• -	1	4.3.1.6	4.3.8.3	4.3.8.1
DATA FLOW HESSAGE	Pressure	POTABLE WATER CONTROL	POTABLE WATER SENSOR DATA	GREY WATER SENSOR DATA	GREY WATER CONTROL	AIR CIRCULATION CONTROL	HUMIDITY	ATHORNOS STREET	<b>1</b>	ATMOSPHERE TEMPERATURES	HAZARDOUS GAS, VAPOR			COMMUNICATION EQUIPMENT	COMMUNICATION DETECTOR	SIGNALS		ACTIVE EVA SUPPORT	PROCEDURES	DIAGNOSES. TREATHENT EXERCIME		ALARMS WARFINGS	CREV	PROTECTED CREW COMMUNICATIONS	MEALIN DATA	ATRIOGU COMMIN	MAII STATIS	ENU STATUS		MUTRIENT CONTENT	NUTRIENT CONTENT			DIAGNOSES, SYMPTOM REQUESTS	THE CONTRACT OF THE PROPERTY	PHYSIOLOGICAL DATA		FHYSIOLOGICAL DATA	AUTOMATIC EMERGENCY COMMANDS	ALARMS, ANNUNCIATIONS, ABNOR-
EX SOURCE EX SOURCE NAME	217 CABIN PRESSURE SENSORS	218 POTABLE WATER SUPPLY	218 POIDSIE WATER SUPPLY SYSTEM	GREY WATER	GREY WATER SYSTE	220 AIR CIRCULATION SYSTEM	221 HUMIDITY SENSORS	222 TEMPERATURE AND COMPOST-	TION SENSORS	222 TEMPERATURE AND COMPOSI- TIOM SENSORS	823 AIR TOXICITY SENSORS	846 CABIN OXYGEN LEVEL		848 COMMUNICATION EQUIPMENT	242 COMMUNICATION EQUIPMENT				10% OFERATORS	110 CREW		_		111 PURSTOTOGICAT MONTHORS	-	4 7 4	XX		211 AIRLOCK	WASTE/BLOOD	12 WASTE/BLOOD ANALYSERS	NA CREEK		110 CREW	110 CREW		2	FAISTOLOGICAL	23 SPACE STATION PAYLOADS	110 CREW
HODE WO	0	H	0	0	н	-	0	0		0	0	0		н	0	Į	н (	o +	-	н	1	н (	<b>)</b>	٠ د	) H		0	0	н	0	0	c	,	H	H	0	•	>	н	<b>H</b>
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FUN NO	4.8.4	4.8.4	4.8.4	4.8	4.00	* · · · ·	4.8.4	4.8.4		<b>₹</b>	4.8.4	4.8.4		4. cs cs	₽.8.5	•	n .	•	? •	<b>4</b> .3	,		? F		1 4		. <del>1</del>	₽.4	₽.3	4.3.1	<b>4</b> 3.1	4.8.1		4.3.1	4.3.1			;	4.3.8	4.3.8

PROCESS NAME	ABNORMAL AND EMERGENCY	PROCEDURES RECREATION SERVICES	_	CREW/GROUND COMMUNICATION	EMU CONTAMINATION CONTROL	SAFETY INTERLOCK HONITOR	SAFETY INTERLOCK HOWITOR	# CONTROL	EVA REALTIME MONITOR &	CONTROL	AIRLOCK ATMOSPHERIC PRES-	OMPOSITION	AIRLOCK ATHOSPHERIC PRES-	SURE & COMPOSITION CNIRI	SUPPORT	AIRLOCK TEMPERATURE &			SURE & COMPOSITION CHIRL	EMU CONTAMINATION CONTROL	EMU CONTAMINATION			EVA VIBUAL INFORMATION			AIRLOCK TEMPERATURE 8	MUMIDITY CONTROL	EVA REALTIME MONITOR W	ROL	EMU MONITOR & MAINTENANCE	EVA REALTINE HONITOR &	AIRLOCK ATMOSPHERIC PRES-	COMPOSITION CUTRL	E		GENERAL DATA PROCESSING	GENERAL DATA PROCESSING	SUPPORT General Purpose Program-		GENERAL PURPOSE PROGRAM- MING TANGHAGE	GENERAL PURPOSE PROGRAMHING LANGUAGE
PROCESS NO	4. 6. 6.	4.3.3.1	4.3.3.8	4.3.3.8	4.3.4.1	4.3.4.4	4.3.4.4		4.3.4.8	4	4.3.4.7		4.3.4.7	. s.		4.3.4.8		4.3.4.7	i	1.5.6.1	4.3.4.1	4.3.4.6		4.3.4.6	4.3.4.7		4.3.4.8	*	4.0.4.0		4.3.4.8	4.3.4.8	4.3.4.7		4.3.4.8	1	#. a. a. a	4.8.8.8	4.8.8.4		4.3.5.4	4.3.5.4
DATA FLOW HESSAGE	MAL CONDITION DATA ABNORMAL AND EMERGENCY CREW PROCEEDINGS	SERV		PROTECTED CREW VOICE, VIDEO	CONTAMINATION WARNING	IMHIBITED OPERATIONS	ACTIVE EVA		EMU/MMU STATUS DISPLAYS	MOTIFICATION WILLS WELLCHOOMS	PRESSURIZE/DEPRESSURIZE	СОИМАИD	PARTIAL PRESSURE WARNING	EVA SUPPORT PROCEDURE			AIRLOCK		CONTINUE IN AIRLOCK	LOCK	DECONTAMINATION INSTRUCTIONS	VISUAL DISPLAY OF INSTRUC-	TIONS FOR EVA PROCEDURES	DISPLAY REQUEST	PRESSURIZE/DEPRESSURIZE COM-	CONTANT SA SUB STRUCTURE	COMMAND TO SET TEMPERATURE,	MOLITIE MMU DIAGNOSTICS				EMU STATUS	OXYGEN, HITROGEN FLOW CONTROL		TEMPERATURE & HUMIDITY STATUS	DISTIATS	DIRLAIR	DATA SUPPORT REQUEST	PROGRAMS, REVISIONS		DISPLAYS, PROGRAM AIDS	CUSTOMER OPERATIONS SOFTWARE
EX SOURCE EX SOURCE NAME	110 CREW					102 OPERATORS	108 OPERATORS		102 OPERATORS	102 OPERATOR			102 OPERATORS	102 OPERATORS			ITY SEEDORS		-	AIRLOCK	159 EVA CREW	159 EVA CREW		TOR HAY CHEM	D 0	TRO TUA COTE	E N	160 MMU	160 MMU		19	161 EMU	162 AIRLOCK ATHOSPHERE	CONTROL	162 AIRLOCK ATHOSPHERE	COMITROT CHRYONED / CRESATOR	A CAROLINA	8 ONBOARD CUSTOMER/OPERATOR	& ONBOARD CUSTOMER/OPERATOR		2 ONBOARD CUSTOMER/OPERATOR	23 SPACE STATION PAYLOAD
HODE	. <b>H</b>	<b>H</b>	0	H 1	H 1	H	0	•	<b>H</b>	0	0		H	H		0	•	•	c	•	H	H	•	<b>o</b> (	>	c	>	0	0	(	0 (	0	H	ı	H	٠	•	0	0	•	H	H
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FUN NO	4 03	4.3.3	<b>4</b> .00.00	. a. a		•	4.3.4		• · · · · ·	4.8.4	4.3.4	,	₩. a. ₩	4.3.4		₩.a.₩	*	į	E-4	) •	4.3.4	4.3.4	* * *	3 6	# · · · · ·	4		4.3.4	4.3.4	,	٠	# · o · #	4.3.4		<b>₽</b> .a. <b>₽</b>	4 8		4.3.5	4.3.5		e. 6.	4.3.5

O PROCESS NAME	MAINTENANCE AND REPAIR	PROCEDURES OPERATIONS PROCEDURES		HENNET BESTER SOFTWARE	SYSTEM	GENERAL PURPOSE	PROGRAMMING LANGUAGE		GM & C SERVICES	TRACKING SERVICES	GM & C SERVICES	===	GH & C SERVICES	ENVIRONMENT MONITOR	GM & C SERVICES	CMD		COLLEI COAKSE FOIRTING	TWO PETENDING	MAGNETIC FIELD DETERMINA-	TIOM Relative alignment deter-	RELATIVE ALIGNMENT DETER-	PALIET COARSE POTUTING	RELATIVE ALIGNMENT DETER-	<b>.</b>	MONITOR CUSTOMER SYSTEMS		STATUS	DIAGNOSTICS SUPPORT	DIAGNOSTICS SUPPORT	FAULT AWALYSIS	FAULT CORRECTION			TREAD ABALTOIS				FAULT CORRECTION	TREND AMALYSIS			115
PROCESS NO	4.3.5.1	4.3.5.8	*		#. w. w.	4.3.5.4	- 4	! ! !	4.4.1	4.4.3	4.4.1	4.4.8	4.4.1	4.	4.4.1	4.4.1.1	•	4.4.1.5		4.4.1.8	4.4.3.4	4.4.1.4	4.4.1.3	4.4.1.4		<b>4</b> .₩.			4.8.4	4.8.4	•	4.5.4.8					4. F. B. T	•	2 · · · · · · · · · · · · · · · · · · ·	4.5.4.3	4.8.4.3	5.1	I I
DATA FLOW NESSAGE	SPACE STATION, PAYLOAD MAIN-	SPACE STATION OPERATIONS	PROCEDURES PROGRAM IDAD COMMANDS	SOFTWARE TEST STATUS	REVISED PROGRAM LOADS	CUSTOMER OPERATIONS SOFTWARE	INSTRUMENT OFFSET TARGET		COORDINATES, MAGNETIC FIELDS	RANGE, RATE OBJECT STATE	STAR COORDINATES	MAGNETIC FIELD		HOMITOR COMDITIONS	DISPLACEMENT	INSTRUMENT OFFSET			POINTING COORDINATES, RATES	MAGNETIC FIELD	ALIGNMENT REFERENCE	STAR COORDINATES	POINTING COMMANDS	DISPLACEMENT		PAYLOAD SYSTEM STATUS	STATE STATES STATES		DIAGNOSTICS MESSAGES	DIAGNOSTICS MESSAGES	DIAGNOSTIC MESSAGES	FAULTS CORRECTION SIMULATION	RESULIS PROPOSED FAILT CORRECTION	1000	11001		PROPOSED FAIRT CORRECTION	TAILTS CORRECTION STAILS	RESULTS	ELEMENTS TO BE ANALYZED	TREND ANALYSIS RESULTS		
EX SOURCE EX SOURCE NAME	102 OPERATORS	108 OPERATORS	108 OPERATOR	-	127 FLIGHT DATA PROCESSING	170 CONSTELLATION INTERFACE	1 CUSTOMER/OPERATOR						FALLE!	SCHOOL SERVING HONILOR		1 CUSTOMER/OPERATOR	1 CUSTONER/OPERATOR			83 SPACE STATION PAYLOADS	23 SPACE STATION PAYLOADS	173 STAR TRACKER	264 PALLET	272 ALIGNHENT SENSORS		1 CUSIONER/OPERATOR	32 CORE OPERATOR				ONBOARD	2 ONBOARD OPERATOR	2 ONBOARD OPERATOR		ONBOARD OFFRATO	GROUND	GROUND	GROUND		GROUND		63 DEVELOPMENT COMMUNICATION	INTERFACE
I O EX SO	н	н	0	H	H	н	0		H	<b>H</b>	0 (	<b>&gt;</b> +	٠ (	>	0	0	c	<b>H</b>		<b>+</b>	н	0	<b>+</b>	0	•	-	H	1	H	<b>H</b> 1	<b>H</b> 1	<b>+</b>	0	0	· H	н	. 0	) H	•	0	H	0	
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FUN NO	4.3.8	4.3.5	4.3.5	•	4.3.5	4.3.5	4.4		<b>+</b> . <b>+</b>	# .	•		•	•	<b>*</b> *	4.4.1	4.4.1	4.4	-49	1.4.1	4.4.1	4.4.1	4.4.1	4.4.3	•	o •	<b>4</b> .8	! ! !	. d	<b>10</b> 1	# · 0 · •	4.0.4	4.8.4	4.5.4	4.8.4	4.8.4	4.8.4	4		4.8.4	4.8.4	5.0	

		SO DEVELOSBERT CORRUPTION	NEW SOFTWARE DATABASE	œ.	MANAGE GROUND SYSTEM
	<b>.</b>	INTERFACE METWORK CONTRO	ORK TORS	: o	TIES
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		EQUIPMENT	NECONE LEGITE	T.	MANAGE FLIGHT SYSTEM FACILITIES
	A 2 1	FORCE DATA PROCESSING EQUIPMENT	RECOMFIGURE	œ.	MAANGE GROUND SYSTEM
	8	3 DEVELOPMENT COMMUNICATION INTERFACE	NEW SOFTWARE DATABABE	5.80.1	INTERFACE MANAGEMENT
	8	_	HETWORK IDRSS SCHEDULE	10 01	
	8 6		TDRSS SCHEDULE	80 ( 61 ( 11 (	INTERFACE MANAGEMENT
			CORETGONALLOR BIALOS, UDAGE	o 21.	ADJUST FOR UNSCHEDULED Mode Chamges
	108	3 OPERATOR	CONFIGURATION STATUS, USAGE	. cs	ADJUST FOR UNSCHEDULED
	106	3 CUSTOMER	CONFIGURATION STATUS, USAGE	85 85	ADJUST FOR UNSCHEDULED
	106	S CUSTOMER	CONFIGURATION STATUS, USAGE	. to . cs	HOLE CHANGES HOLE TRANSCHEDULED
œ	189	-		. st . 1	INTERFACE MANAGEMENT
O O	129	EQUIPMENT GROUND DATA PROCESSING		9	GROUND STATUS DATABASE
. (	,	EQUIPMENT			MANAGEMENT
	<b>.</b>	CUSTOMER/OPERA	RESPONSE	8.8	CONDUCT TRAINING
<del>-</del>	<b>→</b>	CUSTOMER/OFERATOR	EXERCISE PROMPTS, SYSTEM Reactions	æ.	COMDUCT TRAINING
1 1	63		SIMULATED SPACE STATION COMM.	<b>8</b> .8	SIMULATE SPACE STATION
-	9	INTERFACE COMMUNICATION	NEW SOFTWARE DATA		
•	3	INTERFACE	RECEIVED CORRANDS, FAILUAD Data, Core data	n .	SIMULATE SPACE STATION SVSTEM COMM TITMESTS
	63	CUSTOMER, OPERATOR, COM-	CAPABILITIES	6.1	
1 0	83		HODEL REQUIREMENTS	6.1	INTERPRET HODEL REQUESTS
•	đ	TRACTOR			
•	3	TRACTOR	TION MOMITOR DAIN; SINGLA-	o.	SIMULATE SPACE STATION SVSTEM COMM TTEMPUTS
1 0	88	CUSTOMER, OPERATER, COM-	OPERATOR COMMANDS	. O	SIMULATE SPACE STATION
1	80	TRACTOR CUSTOMER, OPERATOR, COM-	PROCEDURES SIMULATION	8	ELEMENTS STEELS AT SOLDS SELECTED
		TRACTOR	-	)	100
-	80	CUSTOMER, OPERATOR, COM-	ES. S.	6.7	SIMULATE SPACE STATION
0 1	80	CUSTOMER, OPERATOR, COM-	HONEL, SOFTWARE ENTRIES	0.	PROCESSORS SOFTWARE DEVELOPMENT
н	60	TRACTOR CUSTONER OPERATOR COM-	SOFTWARF DIAGROSTS MODEL	9	
		TRACTOR		•	
0	78	OWSITE CUSTOMER, CONTRACTOR HARDWARE	PAYLOAD, EQUIPHENT DATA	<b>8</b> .5	SIMULATE SPACE STATION
1	78	ONSITE CUSTOMER, COM-	HARDWARE COMMANDS, ANCILLARY	-10 -10	SIMULATE SPACE STATION
1	48	TRACTOR HARDWARE OFF SITE CUSTOMER, CON-	DATA INTEGRATION MODEL	10.	ELEMENTS SIMILATE SPACE SVSTEM

	PROCESS NAME	ELEMENTS	CONDUCT TRAINING		DEFINE TRAINING PLAN	CONDUCT TRAINING EXERCISE		COMPOCT TRAINING EXERCISE	EVALUATE UPERATOR PERFORMANCE	DEFINE TRAINING FLAN	DEFINITE TRAINING FOREST	URATION CO				REQUIREMENT ANALYSIS AND	REQUIREMENT ANALYSIS AND	GENERATION TOOLS DESIGN # CODE CENERATION		DESIGN & CODE GENERATION	8	BUILD & DELLYERS	BUILD & DELIVERY		TESTING AND ANALYSIS	TESTING AND ANALYSIS	NOTHANNING		DOCUMENTATION	COMMUNICATION		COMMUNICATION	RECONFIGURATION DATA	MANAGENENT	COMMUNICATION		CONFIGURATION CONTROL AND	SUFFORT	MANAGEMENT SUPPORT	3	LOGISTICS PLAN MAINTAIN INTEGRATED	LOGISTICS PLAN	MAINTAIN TECHNICAL	DOCUMENTATION MAINTAIN TECHNICAL	
	PROCESS NO		8.8	8.8	6.8.1	6.8.5	•	D 0	D .	6.8.1	8	•		6.9.1		M .	6.9.8	5 G. 60		6.9.3	4		€.9.4	8	n D	8.9.5	9		8.9.8 8.9.8	6.9.7		6.8.7	8.9.8		6.9.7	6.9.7	6.9.1	- 0		7.1	7.1		7.3	7.3	
40400au+	DATA FLOW HESSAGE		TRAINING EXERCISE OBJECTIVE			EXERCISE PROMPTS, SYSTEM	CEACITOR STRUCKS			TRAINING EXERCISE OBJECTIVE	TRAIBING PARAMETERS	RELEASE DELIVERABLE CONTROL	INSTRUCTION	DETAILED SCHEDULE, STATUS,	AND EIC. Decitorum indrate		REQUIREMENTS UPDATES	FUNCTIONAL DESIGN. DETAILED		FUNCTIONAL DESIGN, DETAILED	MODEL STATUS		MODEL ENTRIES			TEST RESULTS	TEST DOCUMENTS INSTANCTION		HEMOS, PGW DOCUMENT, USER'S GUIDES, PROCEDURES				RECONFIGURATION DATA				RELEASE DEFINITION CONTROL INSTRUCTION	SCHEDILES APPROVATS		CHANGES REQUIRED	PLAN UPDATES		RECOMMENDED CHANGES	CHANGES, REQUESTS	
	AME	LEM	STRUCTOR	INSTRUCTOR	RATOR	RATOR	#OTA#	RATOR		INSTRUCTOR	INSTRUCTOR	OPERATOR, COM-		OPERATOR, COM-	OPFRATOR COM.		OPERATOR, COM-	OPERATOR, COM-		OPERATOR, COM-	OPERATOR COM-		OPERATOR, COM-	OPERATOR COM-		OPERATOR COM-	OPERATOR CON-		OPERATOR, COM-	OPERATOR,		OPERATOR,	OPERATOR, COM-				L BOARD	C BOARD		OPERATOR	OPERATOR		OPERATOR		
	E EX SOURCE NAME		TRAINING	TRAINING	CUSTOMER/OPERATOR	CUSTOMER/OPERATOR	CHRIONER/OPERATOR			TRAINING	TRAINING	CUSTOMER,	TRACTOR	CUSTOMER.	CHRICHER	TRACTOR,	CUSTOMER,	CUSTOMER,	TRACTOR	CUSTOMER,	CUSTOMER	TRACTOR	CUSTOMER,	CUSTOMER	TRACTOR	œ.	CUSTOMER. OF		CUSTOMER, OF	×.	Œ	CUSTOMER, OF	CUSTOMER, OF	TRACTOR	SINI		MADA AFFROVAL BUR	MASA APPROVAL		LOGISTICS OF	LOGISTICS OFF		LOGISTICS OF	102 OPERATOR	
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	FUN NO LEVEL		0.9	0.9	<b>10</b>	<b>.</b>	8		•	8.8	8.8	<b>8</b> .8		о. 10	G.		8.9	6.9		6.9	6.9		6. 6 6. 6	ი დ 51	•	6. 9	6.0	,	о. Ф	<b>8</b> .9	,	ص ق	6.9	(	о с С		n	6.9	!	7.0	7.0		7.0	7.0	

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PROCESS NAME	DOCUMENTATION CONTROL INVENTORIES LOG CUSTOMER USAGE OF	SYSTEM CONTROL INVENTORIES Maintaim integrated	LOGISTICS PLAN LOG CUSTOMER USAGE OF SYSTEM MAINTAIN TECHNICAL	DOCUMENTATION CONTROL INVENTORIES CONFIGURATION MANAGEMENT ANALYZE SYSTEM PERFORM-	ANCE DETERMINE EFFECTS ON INTEGRATED PLAN DETERMINE EFFECTS ON	INTEGRATED PLAN ANALYZE AFFECTED PLANS ANALYZE AFFECTED PLANS ANALYZE INPACT OF PROGRAH	CHANGES AMALYZE IMPACT OF PROGRAM CHANGES AMALYZE SYSTEM OPERATION UPDATE TECHNICAL DOCU-	HENTS AMALYZE FROGRAM CHANGES AMALYZE SYSTEM OFERATION TRANSHIT PROCEDURES AMALYZE PROGRAM CHANGES MONITOR GROUND FACILITY	INVENTORIES MOMITOR STATION INVENT- ORIES MONITOR CUSTOMER, INVENTORIES MOMITOR STATION INVENT-	CUSTOMER
PROCESS HO	4 4	7.4	ot 10	7.6	a . 1 . 7	7.1.3	7.1.4	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	6 4 4 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	4 4 4 6
DATA FLOW HESSAGE	INVENTORY REPORTS SYSTEM USAGE HISTORY	INVENTORY REPORTS PROGRAH PLANS	CHARGEABLE SPACE STATION SYSTEM USAGE PROGRAM PLANS	PROGRAM PLANS PAYLOAD, CORE UPGRADES ANOMALLIES, CHANGES REQUIRED	CHANGES, PLAN UPDATES CHANGE EFFECTS	EFFECTS TO BE AMALYZED LOGISTICS AMALYSIS CHAMGES REQUIRED	PROGRAM PLAMS, CHANGES RECOMMEMDED CHANGES, IMPACTS DOCUMENT CHANGES	REQUIRED CHANGES RECOMMENDED CHANGES PROCEDURE REQUESTS PROGRAM PLANS, CHANGES GROUND FACILITY INVENTORY	REPORTS STATION INVENTORY REPORTS CUSTOMER INVENTORY REPORTS NEW STATION INVENTORY	HANIFES Hanifes
EX SOURCE EX SOURCE NAME	108 OPERATOR 108 CUSTOMER	106 CUSTOMER 118 THIS	11 B H H H H H H H H H H H H H H H H H H	112 THIS 113 THIS 3 LOGISTICS OPERATOR	3 LOGISTICS OPERATOR 3 LOGISTICS OPERATOR	3 LOGISTICS OPERATOR 3 LOGISTICS OPERATOR 3 LOGISTICS OPERATOR	112 TMIS 3 LOGISTICS OPERATOR 3 LOGISTICS OPERATOR	3 LOGISTICS OPERATOR 102 OPERATOR 102 OPERATOR 112 THIS 53 GROUND OPERATORS	102 OFERATOR 106 CUSTOMER 112 THIS	250 MSTS MISSION CONTROL 250 MSTS MISSION CONTROL
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FUN NO	7.0	7.0	7.0	7.00	7.1	E-(	- n.n.  52	44444	* * *	4. 4.

Total Number Of Records: 485

#### E.3P External to Process Data Flows (Platform)

Data flows between external agencies and processes are an indication of the degree of involvement of the external agencies in the operation of the system.

This section shows the data flows between external and processes, organized by external agency. These flows may also be correlated with the input/output data in the functional data base to show amonts of data transferred and interval.

#### The column entries are:

- . Fun. No. The data flow diagram on which the data flow appears
- . Level The data flow diagram level
- . IO Mode Whether the data flow is input to (I) or output from (O) the external
- Ex Source Code number of the external data that some of the names will have alight variations of aliases, identifiable as such by the code number
- . Ex Source Name Name of external source
- . Data Flow Message Name of data flow
- . Process No Source or destination process number
- . Process Name Source or destination process name

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PROCESS NAME	MANAGE REALTIME DATA	MEIUKH HAWAGE REALTIME DATA	KEIUKN Manage deliverable	CUSTONER DATA MANAGE DELIVERABLE	CUSTOMER DATA	MANAGE DELIVERABLE Curtomer data	MANAGE DELIVERABLE CORE	MANAGE DELIVERABLE CORE	ACOUTER BEATETUR DAMA			DATA	DISPLAYS AND CONTROLS	DISPLAYS AND CONTROLS	AMD		DISTLAYS AND CONTROLS		CORE DATA ACCOUNTING	/DATA	CHECK PLATFORM COMMAND	RESTRICTION/CONSTRAINT		SUFFURI CUSTOMER SYSTEM OPERATION	SUPPORT CUSTOMER SYSTEM		VALIDATE CORE COMMANDS	VALIDATE CORE COMMANDS/	VALIDATE PAYLOAD COMMANDS		VALIDATE PAYLOAD COMMANDS		AUTHORIZE OFFICE				RESTRICTION/CONSTRAINT	CUSTOMER DATA PROCESSING	CUSTONER DATA PROCESSING	CACTA WATHOUTS IN	
PROCESS NO	1.1	1.1	1.4	7.4	•	1. ·	1.8	10°		1.1.1	1.8.1		1.8.4	1.8.4	1.5.4	•	# · · · ·	D ( )	e a	•	œ.	,	* o	- P	89. 89.		ы. ы.	e 19			2.1		: c	3 0 5 0 1 0	5 05 5 05 6 05	: ca		2.5.1	2.5.1	00 00 00	} ; ;
DATA FLOW HESSAGE	CORE REALTIME DATA	PAYLOAD REALTIME DATA	PAYLOAD DATA	PAYLOAD DATA		ADDITIONAL ANCILLARY DATA	CORE ARCHIVE DATA	CORE DATA	CORE REALTIME DATA	DAD REALT!	PLATFORM DELAYABLE PAYLOAD		OFFRAIOR VOICE, VIDEO COMMUNICATION	CORE DISPLAYS	OPERATOR VOICE, VIDEO	COMMUNICATION	CODE ACCOUNT NATA	CONT. ACCOUNT DAIN	VALID PAYLOAD DATA		VALID REALTIME COMMANDS	***************************************	PAYLOAD OPFRATING COMMANDS	DATA	CUSTOMER SYSTEM OPERATIONS	DATA	DIEPOSITION	CORE COMMANDS/DATA	VEHICLE & PAYLOAD COMMANDS/	DATA	DISPOSITION	WOTH TROBATE	OPERATOR LOG-OW	DISPOSITION	CORE COMMANDS/DATA	(SEE 8.0 FOR COMMAND PATH)		PROCESSED PLATFORM PAYLOAD DATA	PLATFORM PAYLOAD OPERATING	DATA EXECUTABLE CONSTELLATION	PAYLOAD COMMANDS
EX SOURCE EX SOURCE NAME	7 CORE SYSTEMS	23 SPACE STATION PAYLOADS	27 GROUND CUSTOMERS	28 CUSTOMER RDC'S (NOW-SSDS	SOIS/SCS)		30 ENGINEERING DATA CENTER	33 GROUND OPERATORS	7 CORE SYSTEMS	23 PLATFORM PAYLOADS	23 PLATFORM PAYLOADS			108 OPERATORS	102 OPERATOR	108 OPERATOR					23 PLATFORM PAYLOADS	SUPPLY MACHINES	PLATFORM PAYLO		23 PLATFORM PAYLOADS	1	COK	32 CORE OPERATOR	106 CUSTOMERS		106 CUSTOMERS	102 OPERATOR	8					23 PLATFORM PAYLOADS	23 PLATFORM PAYLOADS	23 FLATFORM PAYLOADS	
I O E	0	0	<b>H</b>	н	c	>	H	H	0	0	0	c	•	н	H	c	<b>,</b> H	c	) <b>H</b>		<b>H</b>	H		)	0	•	۰ ۱	0	0	(	H	-	0	H	0	0	•	Ħ	0	н	ı
LEVEL	-	-	-	-		•	-	<b>-</b> 1	œ	œ	Œ	o	2	CS.	C\$	Q	( C)	q		,	<b>-</b>	-	٠	1	-	•	٠ ٠	-	-1	•	-	œ	Q	œ	CS.	œ	(	02	œ	CQ.	ı
FUN NO	1.0	1.0	1.0	1.0		) •	1.0	1.0	1.1	1.1	1 8:		) •	1.5	ي د د	1.3		-	0 0 0	•	o.	0.8	0.	•	0 0	Ġ	) Si (	9 9	0.8	,	o.	es es		10	83 ED:		:	os o	es so	es es	! !

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PROCESS NAME	DEVELOP RECURRING	OPERATIONS MASTERS RECURRING OPERATIONS	6	SCHEDULES	DEVELOP SHORT TERM	SCREDULES SEQUENCE OPERATIONS		ia)	DEVELOP SHORT TERM SCHEDHIFS	RECURRING OPERATIONS	MASTERS DEVELOP MORMAL DAY CORF	TIONS	DEVELOP MODE		COMPATIBILITY MATRIX DEVELOP MAJOR EVENT	OPERATIONS	DEVELOP WORMAL DAY	DEVELOR HODE	COMPATIBILITY MATRIX	DEVELOF MODE COMPATIBILITY MATRIX			DEVELOP MAJOR EVENT OPPRATIONS	INCORPERATE NEW/REVISED			RESOLVE CONFLICTS	CONFIRM PAYLOAD AND CORE	SCHEDULES CONFIRM PAYLOAD AND CORF	W W	COMPIRM PAYLOAD AND CORE	CONFIRM PAYLOAD AND CORE	SCHEDULES CONFIRM PAYLOAD AND CORE	SCHEDULES CONFIRM PAYTOAN AND CORF	PEV.	
PROCESS NO	3.1	3.1	9	ŧ .	a.	<b>4.</b> ₽	Q E		a.	3.1	3.1.8	! ;	8·1·8	3.1.3	3.1.4	,	3.1.1	3.1.3		9.4.0	3.1.4	•	3.1.4	u. s.	. 1	80 i	ະ ຜ ຄວ	3.8.1	3.8.1	•	7. 22. 3	3.8.1	3.8.1	1.0.50		
DATA FLOW MESSAGE	OPERATIONS CHARACTERISTICS	APPARENT CONFLICTS, POSSIBLE	RESOLUTIONS RESOURCE AVAIL NITTIE THITE	POSSIBLE RESO	SCHEDULE CONFIRMATION CHANGE	VALID, EXECUTABLE PAYLOAD	COMMANDS COMMUNICATION NEEDS		COMMUNICATION SCHEDULE	MSTS SCHEDULES, MANIFESTS	PLATFORM OPERATIONS	CHARACTERISTICS POTTETAL CONTINUE DEFENDED	FORESTER CONFLICTS, DEIALLS	CONFIRMED RESTRICTIONS,	COMSINALISIS MAJOR EVENT SPACE STATION	OPERATIONS CHARACTERISTICS	FALLOAD OFERATIONS CHARACTER-	CONFIRMED RESTRICTIONS/		Collector Confidence, Details	MAJOR EVENT PAYLOAD	CHARACTERISTICS		HEW CORE OPERATIONS		RESOLUTION	RENOUNCE AVAIL., UTILIZ., INTER.	COMMUNICATIONS NEEDS	COMMUNICATION SCHEDULES	SCORESTERNOS ATTICANS	CORE CHANGE REQUESTS	BASELINE SCHEDULES	BASELIME SCHEDULES	SCHEDULE CONFIRMATION.	PAYLOAD CHANGE REQUEST NEW PAYLOAD OPERATIONS	RESOURCE, AVAIL., UTILIZ.,
NODE NO	O 1 CUSTOMERS/OPERATORS	I CUSTOMER/OPERATOR	I CUSTOMERS/OPERATORS		O 1 CUSTOMERS/OPERATORS	I 83 PLATFORM PAYLOADS	I 98 HETWORK CONTROL		O 92 METWORK COMPROL	O 250 WSTS MISSION CONTROL	O 108 OPERATOR	I OS OPERATOR		O 102 OPERATOR	O 108 OFERATOR	STACES SOL	<b>9</b>	O 106 CUSTOMER	I 106 CUSTONER		O 106 CUSTOMER	TOSTROL STATE OSS		O 33 GROUND OPERATOR			T TOOKS	I 92 NEIWORK CONTROL	O 92 NETWORK CONTROL	O 108 OPTRATION		I 108 OPERATOR	I 106 CUSTOMER	O 106 CUSTOMER	O 106 CUSTOMER	
LEVEL	-	7	-		п	-	Ħ	,	-1	-	œ	q	1	œ	œ	α	ł	C\$	CE		œ	Q	1	œ	Q	e o	:	œ	œ	Q		Oğ.	CQ1	æ	œ	Qį
FUN HO I	0.0	0. u	a.o		o. n	3.0	a.0	1	9 9	3.0	3.1	 	1	3.1	3.1			ະ 55	3.1	•	u.,	3.1	1	es es	67	9 00	: :	ss os	ສ.	so Gi		es es	ج. «	8. 8.	ю «	t) ci

### EXSOURCE

PROCESS WAME	RESOLVE CONFLICTS ADJUST FOR UNSCHEDULED	MODE CHANGES ADJUST FOR UNSCHEDULED	MODE CHANGES SEQUENCE PAYLOAD	OPERATIONS COMMAND SCHEDULED MODE	CHANGE OPERATE GH & C SYSTEM	CUSTOME	SERVICES PROVIDE CUSTOMER AVIONICS	SERVICES HOWITOR AND STATUS	SYSTEMS HOWITOR AND STATUS	SYSTEMS OPERATE MOM-GN & C CORT	O M NO MON		2 C C C C C C C C C C C C C C C C C C C	CREMAIR GM & C SYSTEM	GUIDANCE	TRAFFIC CONTROL	u		ATTITUDE COMINCI MAVIDATION	ATTITUDE CONTROL	HAVIGATION	TIME AND FREQUENCY MANAGEMENT	TIME AND FREQUENCY	MAWAGEMENT	TRACKING		TRAFFIC CONTROL		ATTITUDE DETERMINATION	SPACECRAFT STATE/ORBIT	DETERMINATION SPACECRAFT STATE/ORBIT	DETERMINATION	ATTITUDE DETERMINATION	VALIDATE CORE COMMANDS/	DATA PETDOOG / P	REBOOST/REENINY TARGETING ATTITUDE AND TRANSLATION
PROCESS NO	n n œ n • •	a. a. 4	8.4.1	3.4.8	4.1	4.4	•:•	<b>♣</b> . ®	₽:	æ.	ď.		<b>4</b> 4	4.1.8	4.1.8	4.1.4	4.1.4	<b>4</b> .4.4	4.1.5	4.1.3	4.1.1	4.1.6	4.1.8		B . T . T		4.1.4	4.1.3	4.1.1.4	4.1.1.1	4.1.1.1	•	4.1.1.4		9	4.1.3.1
DATA FLOW HESSAGE	INTERFER., POSSIBLE RESOLUTIONS PREFERRED RESOLUTION NOTICE OF UNSCHEDULED MODE	CHANGES NOTICE OF UNSCHEDULED HODE	CHANGES VALID, EXECUTABLE PLATFORM	FAILDAN CORRANDS SCHEDULED SYSTEM HODE CHANGE	CORE AVIONICS DATA	AVIONICS SERVICES REQUESTS	AVIONICS SERVICES	CORE SYSTEM STATUS, ALARMS	CUSTOHER ALARHS, SYSTEM	SIAIUS SENSOR DATA	MON-GH & C OPERATING COMMANDS		REBUCK DATA GM M D OPERATIED COMMANDS	_	MANEUVER PLAN	MANEUVER CHANGE	COLLISION WAKEING	TORQUE COMMAND THRUNTER COMMANDS			OM RATE	TIME, FREQUENCY REFERENCE	TIME, FREQUENCY UPDATES		UDSECT BIRIES, ORBITS MODE DISECTION	RANGE. RATE DIRECTION	CO-FLYER MANEUVER COMMAND	TORQUE COMMANDS		POSITION, RATE	SECOND SOURCE MAVIGATION	STATE STAB BOTHERY TEEDS	STAR POINTING COORDINATES	CHANGE		HODES, AMPLITUDES
EX SOURCE EX SOURCE MAME	106 CUSTOMER 102 OFERATOR	106 CUSTOMER	23 PLATFORM PAYLOADS	102 OPERATOR	3 PAYLOADS, COMST.	13 PAYLOADS, CONST. ELENENTS	13 PAYLOADS, CONSTELLATION FIFHFUTS	102 OFFRATOR	106 CUSTOMER	201 NOW-GN & C CORE SYSTEM	201 NON-GH & C CORE SYSTEM		3 5 5 5	OPERATO		102 OPERATOR	CONTROL MONTHY	REACTION	RATE GYROS	RATE			167 TIME, FREQUENCY SOURCES	S MODE A	9 9	TRACKING	COMSTELLATION IN		S RATE	166 GPS TRACKER	172 IDRSS	GENERAL BATA NAL	73 STAR	z	33 GROUND OPERATOR	
I O E	0 н	<b>H</b>	-	H	<b>H</b> (	0	H	H	Ħ	0	<b>H</b>	c	) <b>H</b>	0	н	۰ ۱	٠.		0	0	0 0	•	H	c	) н	0	H	₩ (	0 (	0	0	c	• н	0	0	0
LEVEL	<b>CR</b> CR	Œ	æ	CQ	<b>~</b>	-	-	-	-	-	т	-	•	œ	œ	CS C	<b>8</b> 00	3 CQ	CS.	CQ (	ce c	8	œ	a	1 01	Ħ	CS (	08 (	n :	9	ຄ	ĸ	ສ	n	n	ເ
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FUN NO LEVEL		I O EX SOURCE MODE NO	CE EX SOURCE NAME	DATA FLOW MESSAGE	PROCESS NO	PROCESS WANE
4.1.3	n	1 1	SEMSORS 136 CMG'S	TORQUE COMMAND	<b>4.1.</b> 3.8	CONTROL Generate attitude
4.1.3	n	0	36 CMG'S	CMG STATUS	4.1.3.8	COMMANDS GENERATE ATTITUDE
4.1.3	ю	1	138 REACTION CONTROL SYSTEM	THRUSTER FIRING COMMANDS	4.1.3.8	COMMANDS Generate Attitude
4.1.3	n	0	138 REACTION CONTROL SYSTEM	RCS STATUS	4.1.3.8	COMMANDS Generate attitude
4.1.3	n	0	165 RATE GYROS	ATTITUDE INCREMENTS	4.1.8.1	COMMANDS ATTITUDE AND TRANSLATION
	ю	H H		POINTING COMMAND	4.1.3.4	COMPROL POLKTING MOUNT COMPROL
<b>4.1.</b> 3	ກກ	O O	178 POINTING MOUNT 861 MAGNETONETERS	GIMBAL POSITION MAGNETIC FIELD	B) E	
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	) <b>!</b>				* · · ·	
	o		888 MAGNETIC TORQUER	TORQUE COMMAND	4.1.3.8	GENERATE ATTITUDE
4.1.6	ត ត	00	166 GPS TRACKER 166 GPS TRACKER	TIME REFERENCE FREQUENCY REFERENCE	4.1.6.1	TIME-SOURCE MANAGEMENT FREQUENCY SOURCE MANAGE-
,						HENT
♣.1.6 ♠.1.6	ກກ		167 TIME, FREQUENCY SOURCES 167 TIME, FREQUENCY SOURCES	TIME REFERENCE Time Frequency updates	4.1.6.1	TIME-SOURCE MANAGEMENT
	ຄ	1	TIME, FREQUENCY	CHCY REFERE	9.1	FREQUENCY SOURCE HANAGE-
4.1.6	n	H	167 TIME FREQUENCY SOURCES		9	
	8		TIME, FREQUENCY	rus	4.1.6.4	DEVICE MANAGEMENT
æ: <b>→</b>	œ	0	182 THERMAL CONTROL SYSTEM	THERMAL SENSOR, EFFECTOR DATA	4.8.8	
<b>4</b> .8	œ	1	182 THERMAL CONTROL SYSTEM	THERMAL CONTROL COMMANDS	4. 8.	SYSTEM OPERATE THERMAL CONTROL
ni ci	38 C8	7 0	183 POWER SYSTEM 183 POWER SYSTEM	FOWER CONTROL COMMANDS	4 4 6 0	OPERATE POWER SYSTEM
	œ		ECLSS	CONTROL COMMANDS	4.63	FERATIO
	<b>ce</b> 4		4 ECLSS		4.8.4	ECLSS OPERATION
×.	32	<b>87</b>	BS STRUCTURES SYSTEM	SEESOR HOMINOR	<b>4</b> . m. u	STRUCTURES AND MECHANISM
<b>4</b> .8	-	0 16	186 MECHANISMS	MECHANISM SENSOR, EFFECTOR	<b>4</b> . 8. 3	STRUCTURES AND MECHANISM
æ. <b>→</b>	Q	1 18	86 MECHANISMS	CONTROL COMMANDS	5.8.3	SUPPORT STRUCTURES AND MECHANISM
4 a	α	3	transling moltrylammon ara		•	
	1			SPARES	0 N	COMPUNICATIONS SESTEM
Q1 Q	œ <b>~</b>	- E	848 COMMUNICATION EQUIPMENT	HODE, POINT, OPERATION	4. 03. 10.	
<b>!</b>	,			CONDITION		COMFIGURE FOWER DISTRIBU-
4.8.1	•	108	)2 OPERATOR	CONFIGURATION COMMANDS	4.8.1.8	COMFIGURE POWER
4.2.1	•	I 102	3 OPERATOR	STATUS, ABNORMAL POWER	4.2.1.3	DISTRIBUTION POWER SOURCE MANAGEMENT
-		801	S OPERATOR	CONDITION POWER SOURCE COMMANDS		
# 1.8.1		168			4	EVALUATE ARRAY PERFORM- ANCE

PROCESS NAME	POWER SOURCE MANAGEMENT POWER SOURCE MANAGEMENT	SOURCE	POWER SOURCE HANAGEHENT		POWER SOURCE MANAGEMENT	CONFIGURE POWER DISTRIBU-	CONFIGURE POWER DISTRIBU-			AKKAY DEPLOYMENT	HANAGE THERMAL LOAD		DEVICE MANAGENENT (EXPERT DMS)	HANAGE THERMAL LOAD	MANAGE THERMAL LOAD		MANAGE THERMAL LOAD	THERMAL DEVICE MANAGEMENT		COMMUNICATION EQUIPMENT	CONTROL COMMINICATIN TOHITBUENT	STATUS HOMITORING	AUTOMATIC CONTROL PRO-	CESSING AND CARACTED	CAULTUR AND WAKRING	GH & C SERVICES	_	ن ع	GE C NERVICEN	CHAIRDRENT HORITOR	• 5		GM & C SERVICES	GROUND TRACK DETERMINA-	PALLET COARSE POINTING	A	TION	MAGNETIC FIELD DETERMINA- TION	RELATIVE ALIGNMENT DETER-	RELATIVE ALIGNHENT DETER-
PROCESS NO	4.6 6.6 1.6 1.0 1.0	4.8.1.3	4.8.1.3	4.8.1.3	4.8.1.3	4.8.1.8	4.2.1.2		4.18.11.4	#	4.8.20.1		<b>4</b> .8.8.8	4.8.8.1	4.8.8.1		4.8.9.1	4. 0. 0.		4. 10. cs.	4 8		4.3.8.3	9	1.6.0	4.4.1		4.4.1		8 - 4	1 61		4.4.1	4.4.1.1	4.4.1.3	4.1	•		4.4.1.4	4.4.1.4
DATA FLOW HESSAGE	ARRAY CURRENTS, VOLTAGES Regulator set points		BUS LOADS, SWITCH STATUS	2	STORAGE STATUS, TEMPERATURE	SWITCH POSITION	SWITCH STATUS, LOAD, CURRENTS	. VOLTAGES	HODE COMPIRMATION	ABRORMAL THERMAL CONDITIONS	FLUID TEMPERATURE, PRESSURE,	AND FLOW RATE	EQUIPHENT STATUS	STATUS AND PERFORMANCE	CONTROL PARAMETERS		ALUID TEMPERATURE, PRESSURE,	EQUIPMENT STATUS		COMMUNICATION EQUIPMENT	COMMUNICATION DETECTOR	SIGHALS	AUTOMATIC EMERGENCY COMMANDS	ALARMS ANNINCTATIONS ABOUT	- 12	INSTRUMENT OFFSET, TARGET	SELECTION	COUNTRAILS, MAGNETIC FIELDS	MACHET THEFT	POINTER COMMANDS			DISPLACEMENT	instrument offset	TARGET SELECTION	SUBSATELLITE COORDINATES,	MACUTALING COOKDINATES, KATES		ALIGNMENT REFERENCE	STAR COORDINATES
EX SOURCE EX SOURCE NAME	ARRAY ARRAY		189 POWER SOURCE CONFIGURA- TIOM SWITCH GEAR	ENERGY STORAGE	EMERGY STORAGE	SWITCHES	191 DISTRIBUTION/LOAD		188 BOLAR ARKAI	OPERA		LOOPS	KET BUS AND KADIATOR FLUID LOOPS	225 BUS AND RADIATOR FLUID CONTROL	225 BUS AND RADIATOR FLUID	CONTROL	KAO FALLOAD BIDE INTERFACE NEAT FROMANGED	826 PAYLOAD SIDE INTERFACE	HEAT EXCHANGERS	242 COMMUNICATION EQUIPMENT	242 COMMUNICATION EQUIPMENT		23 PLATFORM PAYLOADS	108 OPERATOR		1 CUSTOMER/OPERATOR		174 STAB TBACKTB	-			SEKSORS	272 ALIGHMENT SENSORS	1 CUSTOMER/OPERATOR		23 PLATFORM PAYLOADS	SCACTVAC MECTIFICATION		23 PLATFORM PAYLOADS	173 STAR TRACKER
I O EX	ОН	H	0	<b>H</b> (	۰ د	-	0	ć	۰ د	Н	0	(	5	0	н	c	>	0		H	0		H	H		0	,	٠ (		н	0	,	0	0	0	+	-	1 1	н	٥
LEVEL	សស	භ	n	<b>1</b> 0	9 1	3	n		3 6	8	ຕ	t	o	ຕ	ກ	t	3	ю		ກ	ຄ		m	n		œ	c	<b>8</b> 0	a ca	ce ce	œ	(	D2 1	n	10	ຄ	ĸ	<b>)</b>	n	ຄ
FUN NO	4. 4. 61. 63. 11. 11.	<b>4</b> .83.1		4.8.4 1.0	 	1 · 8 · 1	4.8.1			4.8	4.8.8	•		4.8.8	4. 6. 6.	0	•	e: • 3: • 5:		<b>4</b> .8.5	4.8.5		#. æ. æ.	<b>♣</b> .8		<b>4</b> : <b>4</b>	•	•	4	4.4	4.4	,		<b>4</b> . <b>4</b> . <b>7</b>	4.4.1	4.4.1		! (	1.4.1	4.4.1

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PROCESS NAME	MIMATION PALLET COARSE POINTING RELATIVE ALIGNHENT DETER-	MIMATION MONITOR CUSTOMER SYSTEMS STATUS	NOWITOR CORE SYSTEMS STATUS DIAGNOSTICS SUPPORT	FAULT ANALYSIS	FAULT CORRECTION	TREND AWALYSIS	TREND AMALYSIS MANAGE FLIGHT SYSTEM	FACILITIES MANAGE GROUND SYSTEM	HAWAGE GROUND SYSTEM FACILITIES	MANAGE GROUND SYSTEM FACTITIES	MANGE FLIGHT SYSTEM	HANAGE GROUND SYSTEM FACILITIES
PROCESS NO	4.4.1.0	4 4 cr -	4.8.4	4.0.4	4.0.4.0	4.8.4.3	8.4.8 8.1	æ.	æ. œ.	CQ.	5.1	ce .
DATA FLOW HESSAGE	POINTING COMMANDS DISPLACEMENT	PAYLOAD SYSTEM STATUS	DIAGNOSTICS HESSAGES	DIAGMOSTICS MESSAGES PROPOSED FAULT CORRECTION	FAULTS CORRECTION SIMULATION RESULTS	ELENENTS TO BE AMALYZED	TREND AMALYSIG RESULTS Hew Software Database	NEW SOFTWARE DATABASE	HEIWORK, TDRSS SCHEDULE	SCHEDULE REQUESTS	Recompigure	reconfigure
EX SOURCE EN SOURCE NAME	264 PALLET 272 ALIGNHENT SENSORS	1 GUSTOMER/OPERATOR 32 CORE OPERATOR	GROUND	33 GROUND OPERATOR 33 GROUND OPERATOR	33 GROUND OPERATOR		SS GROUND OPERATOR 63 DEVELOPMENT COMMUNICATION INTERFACE	HT COMMUNICATION	92 HEIWORK CONTROL	92 HEIWORK COMIRCI	187 FLIGHT DATA PROCESSING EQUIPMENT	PROCESSING
HODE	н о	н н	<b>H</b> 1	н о	H	0 1	• 0	0	0	H	н	H
LEVEL	nn	CR CR	<b>Q</b> 1	nn	n	ស	n ⊶	-	-	-	-	<b>~</b>
FUN NO LEVEL	• • • • • •	÷ ;	<b>4</b>	4.0.4 4.0.4	<b>₹</b> .80.	4.8	# 0 0 : #	<b>8</b> .0	o. 0	0	E-	o. 15

Total Mumber Of Records: 182

#### E.4 Process to Process Data Flows

The process-to-process data flows, shown in this section, are the primary measure of interconnection for realtime data flow and the consequences of collecting or separating functions. The data entries are similar to those of Section E.3.

SHD PROCESS NO SHD PROCESS HAME	3.0 SCHEDULE AND EXECUTE	OPERATIONS 8.0 MANAGE CUSTONER/OPERATOR			3.0 SCHEDULE AND EXECUTE OPERATIONS	5.0 MANAGE SOUS FACILITIES	4.0 OPERATE CORE SYSTEM	6.0 DEVELOP, SIMULATE,	INTEGRATE, A	S.C. HAMBGE KKUK FACILITIES	1.3 DATA DISTRIBUTION	1.3 DATA DISTRIBUTION	1.3 DATA DISTRIBUTION	4.3 SUPPORT FLIGHT CREW	ACTIVITIES 1.3 DATA DISTRIBUTION	1.1 HANAGE REALTIME DATA	1.1 HAWAGE REALTIME DATA	1.1 HAWAGE REALTIME DATA	RETURN 1.8 HANAGE DELAYABLE DATA	RETURN 1.4 HANAGE DELIVERABLE	CUSTOM	CUSTONER DAIA	1.4 HANAGE DELIVERABLE DATA 1.5 HANAGE DELIVERABLE CORE	DATA  1.5 MANAGE DELIVERABLE CORE	DATA  1.5 MANAGE DELIVERABLE CORE	DATA 1.3 DATA DISTRIBUTION	1.3 DATA DISTRIBUTION	1.3 DATA DISTRIBUTION	1.5 MAWAGE DELIVERABLE CORE	DATA 1.3 DATA DISTRIBUTION
DATA FLOW HESSAGE	RES. CONSTR. P/L CHHDS, VALID	OPERATOR CHMDS/DATA RES. COMSTR. P/L CHMDS, VALID	NTOR CHMDS/DATA HABLE CORE COMMANDS	DATA	EXECUTABLE CORE COMMANDS. Data	RECONFIGURE DISCONNECT	RECONFIGURE DISCONNECT	MEW/UPDATED DATABASE,	SOFTWARE		VOICE, VIDEO COMMUNICATION	VOICE, VIDEO COMMUNICATION	REALTIME DATA	FLIGHT CREW DATA	DELAYED DATA	REALTINE DATA	VOICE, VIDEO COMMUNICATION	VOICE, VIDEO COMMUNICATION	DELAYED DATA	VOICE, VIDEO COMMUNICATION	VOICE VIDEO COMMINICATION		COSTORER DAIR OPERATOR DAIA	VOICE, VIDEO COMMUNICATION	VOICE, VIDEO COMMUNICATION	VOICE, VIDEO COMMUNICATION	CUSTOMER DATA	VOICE, VIDEO COMMUNICATION	ADDITIONAL ANCILLARY DATA	VOICE, VIDEO COMMUNICATION
PROCESS NAME	MANAGE CUSTOMER/OPERATOR	SUFFLIED DAIA SCHEDULE AND EXECUTE	OPERATIONS SCHEDULE AND EXECUTE	OPERATIONS	OPERATE CORE SYSTEM	OPERATE CORE SYSTEM	MAMAGE SSDS FACILITIES AND RESOURCES	MANAGE SEDS FACILITIES	AND RESOURCES DEVELOP SIMILATE	INTEGRATE, AND TRAIN	HAWAGE REALTIME DATA	MANAGE REALTINE DATA	HANAGE REALTIME DATA	HANAGE REALTINE DATA	MANAGE DELAYABLE DATA	KETUKN DATA DISTRIBUTION	DATA DISTRIBUTION	DATA DISTRIBUTION	DATA DISTRIBUTION	DATA DISTRIBUTION	DATA DISTRIBUTION			DATA DISTRIBUTION	DATA DISTRIBUTION	MANAGE DELIVERABLE	CUSTOMER DATA Manage deliverable	CUSTOMER DATA Manage deliverable	CUSTOMER DATA Manage deliverable	CUSIOHER DATA Manage deliverable core
PROCESS	0.8	a.0	a.0	,	o <b>.</b>	<b>0</b> .•	<b>8</b> .0	8.0	9	)	1.1	1.1	1.1	1.1	1.8	1.3	1.3	1.3	1.3	1.3	ب ب		1.3	1.3	1.3	1.4	1.4	1.4	1.4	1.5
HODE	0	-	0	•	•	н	0	н	c	)	H	0	0	<b>H</b>	0	н	н	0	H	-	0	•	0	H	0	н	H	0	н	<b>H</b>
FUN NO LEVEL	0	0	0	•	•	0	0	0	o		-	-		-	1	-	H	-	<b>A</b>	-	-	•		-	-	7	-	-	ч	Ħ
FUH MC	0.0	0.0	0.0	(	) )	0.0	0.0	0.0	0	1	1.0	1.0	1.0	1.0	6.E	0. 1	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

0 0 0 0	1.5	DATA Hanage deliverable core	OPERATOR DATA	n.	DATA DISTRIBILION
_		DELIVERABLE	VOICE, VIDEO COMMUNICATION	r. 1.	DATA DISTRIBUTION  DATA DISTRIBUTION
	u. 4 u. 5	HANAGE DELIVERABLE CORE DATA SUPPORT FLIGHT CREW	ADDITIONAL ANCILLARY DATA FLIGHT CREW DATA	# n	MANAGE DELIVERABLE Customer data Manage Realtime data
	÷	IES Realtine	REALTIME DATA AVAILABLE	8:1:	RETURN PRIORITIZE REALTIME DATA
H C	1.1.1	ACQUIRE REALTIME DATA	VOICE, VIDEO COMMUNICATION		PREPROCESSING
	7	REALTIME	TV STAT		SUPPORT CUSTOMER SYSTEM
CQ;	1.1.1	ACQUIRE REALTIME DATA	VOICE, VIDEO	4. s. s.	CREW/GROUND
_	1.1.1	ACQUIRE REALTIME DATA	VOICE, VIDEO	4.8.8.8	CREW/GROUND COMMUNICATION
	•	REA		1.1.1	ACQUIRE REALTIME DATA
e q	8 : F : F	MONITOR REALTINE DATA	REALTIME DATA Disbarch southing	1.1.8	FORMAT REALTIME DATA
	1.1.3		-	- T - T	DISPATCH REALTIME DATA
	4	HOWITOR REALTIME DATA	LINK REQUIREMENTS		TELEMETRY CONTROL
		REALTIME	DISPATCH SCHEDULE	1.1.3	MONITOR REALTIME DATA
1 0		DISPATCH REALTIME DATA	FORMATTED DATA AVAILABLE Peatting hata	10 r	FORMAT REALTIME DATA
e a	-	REALTIME	REALTIME DATA	 	PREPROCESSING CENTRAL DATA CARTIES
ce ·	•	FORMAT REALTIME DATA	REALTIME DATA	1.1.8	PRIORITIZE REALTIME DATA
	1.1.5	FORMAT REALTIME DATA	FORMATTED DATA AVAILABLE	1.1.4	DISPATCH REALTIME DATA
	1.6.4	TARE SOCIAN TEG	VOICE, VIDEO COMMUNICATION	۳. ۲.	REALTIME
	•	PREPROCESSING	HE DATA	1.1.1	DISPATCH BEALTIME DATA
	13	GENERAL DATA CAPTURE	REALTINE DATA	1.1.4	
	01 80	HER SYSTEM		1.1.1	TEALTIME D
O O	4.2.5.7	CONTROL	THE AVAITABLITERS	•	
	4.8.5.7	CONTROL	LIEK REGIIRENTERS	? F	REALTIME
es H	4.3.3.8	ND COMMUNICATION	VOICE, VIDEO		ACCUITED BEATTIME DATA
O 02	4.3.3.8	MUNICATION	VOICE, VIDEO	1.1.1	REALTIME
	1.2.1	CAPTURE DELAYED PAYLOAD DATA	UNFORMATTED PAYLOAD DATA	1.8.5	DELAYED DA
	œ	IZE DELAYED DATA	TRANSMISSION PRIORITIES	1.8.4	DISPATCH DELAYED DATA
	M (	DELAYED DATA	DISPATCH SCHEDULE	1.8.4	DISPATCH DELAYED DATA
	ai d	DELAYED DATA	LIBK AVAILABILITY	4.8.5.7	TELEMETRY CONTROL
	3 (		LINK REQUIREMENTS	4.0.0.7	TELEMETRY CONTROL
	8 0	DISTRICH DELAKED DATA	TRANSMISSION PRIORITIES	ce :	PRIORITIZE DELAYED DATA
· C	œ	DELAYED DATA	BULK DATA	n -	HOWITOR DELAYED DATA
	1.8.4	DELAYED DATA		. a	CHEST DATA CASTIST
	1.3.1	PRE-PROCESSING		4.6	DISPATCH DELAYED DATA
	1.3.8	DATA CAPTURE		4.00.1	DISPATCH DELAKED DATA
	<u>س</u>	CONTROL	LINK REQUIREMENTS	1.8.3	
	4.8.5.7	RY CONTROL		1.8.3	MONITOR DELAYED DATA
Q '	1.1.	ACQUIRE REALTIME DATA	VOICE, VIDEO COMMUNICATION	1.3.1	

ESS NO AND PROCESS NAME		1 PRE-PROCESSING	ACOUIRE	ACQUIRE		DISPA		S KOUTING AND HEARTHUNG AND HEARTHUNG AND THE PROPERTY OF THE	CHALITY VERT		B DISPATCH DELAYED DATA		PREFROCESSING BOTH BOOTHS	-	MANAGEMENT CUSTOHER DATA INTERFACE	MAWAGEMENT	CUSTOMER DATA INTERFACE MANAGEMENT		MANAGEMENT			MANAGEMENT CORE DATA INTERFACE HAN-	AGEHENT		Define Control of the		MANAGEMENT 8	ROUTING AND TRANSMISSION	ROUTING AND TRANSMISSION		ROUTING AND TRANSMISSION	ROUTING AND TRANSMISSION	ROUTING AND TRANSHISSION	:	ROUTING AND TRANSHISSION	ROUTING AND TRANSMISSION	ROUTING AND TRANSHISSION	QUALITY VERIFICATION	CUSTOMER DATA INTERFACE
RED PROCESS	1.3.8	1.0.1	1.4.4	1.1.1	1.1.4	7.8.4	H .	 	. e.	7.7			7.6	•	1.4.1		1.4.1	1.4.1	-		1.5.1	1.8.1		1.8.1	-	9.00		n.u.	1.3.3		1.3.3	1.3.3	1.3.3	,	1.3.3	1.3.3	1.3.3	1.3.4	1.4.1
DATA FLOW MESSAGE		DELAYED DATA Delayed data	VOICE, VIDEO COMMUNICATION	VOICE, VIDEO COMMUNICATION	REALTINE DATA	DELAYED DATA	MEINARGHITTED REW DATA	VIDEO	OCESSED	⋖	DELAYED DATA	RETRANSMITTED NEW DATA	VOICE, VIDEO COMMUNICATION	ER DATA	CUSTOMER VOICE, VIDEO	COMMUNICATION	CUSTONER VOICE, VIDEO COMMUNICATION	RETRANSMISSION REQUEST	OPERATOR VOICE VIDEO		OPERATOR VOICE, VIDEO	COMPONICATION RETRANSMISSION REQUEST		CORE DATA	PRE-PROCESSED DATA	DATA STATUS		CUSTOMER VOICE, VIDEO	CUSTONER DATA	!	CONTONER VOICE, VIDEO	RETRANSMISSION REQUEST	RETRANSHISSION REQUEST		COMMUNICATION	CORE DATA	OPERATOR VOICE, VIDEO	COMPAINT DATA	CUSTOMER DATA
PROCESS NAME	REALTIME	DISPATCH DELAYED DATA DISPATCH DELAYED DATA	ESSING	Pre-Processing	PREPROCESSING	PREPROCESS ING	THE MOCKED THE	PREPROCESSING	PREPROCESSING			GENERAL DAIA CAPTURE	AND	AND T	ROUTING AND TRANSMISSION		ROUTING AND TRANSMISSION	ROUTING AND TRANSMISSION	ROUTING AND TRANSMISSION		ROUTING AND TRANSHISSION	ROUTING AND TRANSMISSION		ROUTING AND TRANSMISSION	QUALITY VERIFICATION	VERIFI		CUSTOMER DATA INTERFACE MANAGEMENT	CUSTOMER DATA INTERFACE	MANAGEMENT	COSTORER DAIA INTERFACE MANAGEMENT	CUSTOMER DATA INTERFACE	CORE DATA INTERFACE	MANAGEMENT		CORE DATA INTERFACE MANAGEMENT	CORE DATA INTERFACE	DISTRIBUTED DATA	O TR
PROCESS	1.1.4	3 CS	1.3.1	Б.	i i			'n	n	٠	•	n e n e		n	1.3.3		ນ. ຄ.	1.3.3	1.3.3	1	1.3.3	1.3.3	1	1.3.3	1.3.4	n	•	1.4.1	1.4.1	•	1.8.1	1.4.1	1.8.1			1.8.1	1.5.1	5.2.1	1.3.3
I O MODE	0 0	0	0	H	н	<b>-</b> •	٠.	۰ ٥	0	H	<b>+</b> (	<b>&gt;</b> +	۰ ٥	0	н		0	<b>H</b>	н	1	0	H	,	0	H	0		0	н		-	H	0	•	•	н	н	н	0
LEVEL	Ož C	S 05	œ	C\$	OP (	<b>X</b> (	8 0	9 02	Ø	œ	Ož (	<b>3</b> 2 0	3 (8	œ	Qŧ		C\$	œ	Q	:	œ	CQ2	•	<b>32</b>	Q	œ	(	OS.	œ	c	e	œ	œ	c	e	œ	O\$	œ	<b>6</b> 8 ·
FUN NO	1.3	. r.	1.3	•	٠	n :	•		•	1.3	r.			•	1.3		n.	n. u	E 1.3	-63	8. 8.	1.3		e. <del>.</del>	1.3	•		1.3	/ 1.3		•	1.3	1.3		?	1.3	1.3	1.3	1.4

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21-JUL-1985	1985				EXSOURCES		984. 1
FUN NO	LEVEL	HODE	PROCESS	PROCESS NAME	DATA FLOW MESSAGE	SHD PROCESS NO SHD PROCESS NAME	HAHE
1.4	C\$	H	1.3.3	ROUTING AND TRANSMISSION	CUSTOMER VOICE, VIDEO	1.4.1 CUSTONER DATA	A INTERFACE
1.4	CQ .	<b>H</b>	1.3.3	ROUTING AND TRANSMISSION	RETRANSHISSION REQUEST	HAMAGEMENT 1.4.1 CUSTONER DATA	A INTERFACE
1.4	Qŧ	•	1.3.3	ROUTING AND TRANSMISSION	CUSTONER VOICE, VIDEO	1.4.1 CUSTONER DATA	A INTERFACE
1.4	CQ	0	1.4.1	CUSTOMER DATA INTERFACE	RETRANSMISSION REQUEST	HANAGEHENT 1.3.5 ROUTING AND T	TRANSHISSION
1.4	CQ2	н	1.4.1	CUSTOMER DATA INTERFACE	CUSTOMER VIDEO, VOICE	1.5.3 ROUTING AND I	TRANSHISSION
1.4	œ	н	1.4.1	CUSTONER DATA INTERFACE	CUSTOMER DATA	1.3.3 ROUTING AND T	TRANSMISSION
1.4	CE .	•	1.4.1	CUSTOMER DATA INTERFACE MANAGENEUT	CUSTONER VIDEO, VOICE	1.5.5 ROUTING AND TRANSHISSION	RANSHISSION
1.4	Œ	0	1.4.1	CUSTOMER DATA INTERFACE MANAGEMENT	CUSTOMER DATA	1.4.8 CUSTONER DATA CAPTURE	CAPTURE
1.4	œ	0	1.4.1	CUSTOMER DATA INTERFACE	OFFSITE CUSTOMER VOICE, VIDEO		AND
1.4	CE	н	1.4.1	CUSTOMER DATA INTERFACE	OFFSITE CUSTOMER VOICE, VIDEO		AND
1.4	CE .	H	1.4.8	CUSTOMER DATA CAPTURE	CUSTOMER DATA	1.4.1 CUSTONER DATA	INTERFACE
1.4	œ	0	1.4.8	CUSTOMER DATA CAPTURE	CUSTOMER BULK AND REALTIME	1.4.3 CUSTOHER DATA	HANDLING
<b>♥</b> E-64	æ	0	1.4.8	CUSTOMER DATA CAPTURE	DAIA CUSTOMER DAIA FOR PROCESSING	1.4.5 IEVEL O CUSTON	CUSTOMER DATA
<b>4</b> .1	Œ	н	1.4.3	CUSTOMER DATA HANDLING	CUSTOMER AND BULK REALTIME	1.4.8 CUSTONER DATA	CAPTURE
3.4	œ	H	1.4.3	DATA	DAIA NOW-REALTIME ANCILLARY	1.4.4 AMCILLARY DATA	A ACQUISTION
1.4	CE .	<b>H</b>	1.4.3	CUSTONER DATA HANDLING	PROCESSED BULK AND REALTIME DATA		HER DATA
1.4	æ	0	1.4.3	CUSTOMER DATA HANDLING	CUSTOMER DATA	_	AND
1.4	œ	0	1.4.4	ANCILLARY DATA ACQUISTION	NOH-REALTIME ANCILLARY	TRANSMISSION 1.4.3 CUSTONER DATA	HANDLING
1.4	æ	H	1.4.5	LEVEL O CUSTOMER DATA	CUSTOHER DATA FOR PROCESSING		
1.4	œ	0	1.4.5	LEVEL O CUSTOMER DATA PROCESSING	PROCESSED BULK AND REALTIME DATA	1.4.3 CUSTOMER DATA	HANDLING
1.4	C\$	0	1.4.7	SSIS ROUTING AND TRANSHISSION	OFFSITE CUSTOMER VOICE, VIDEO	1.4.1 CUSTONER DATA	INTERFACE
1.4	œ	H	1.4.7	BSIS ROUTING AND	OFFSITE CUSTOMER VOICE, VIDEO	1.4.1 CUSTOCKE DATA	INTERFACE
1.4	CQ.		1.4.7	SSIS ROUTING AND TRANSMISSION	CUSTOMER DATA	1.4.3 CUSTONER DATA	HANDLING
1.5	CQ2	0	1.3.3	ROUTING AND TRANSMISSION	CORE DATA	1.5.1 CORE DATA INTE	INTERFACE
1.5	œ	0	1.3.3	ROUTING AND TRANSMISSION	OPERATOR VOICE, VIDEO	1.5.1 CORE DATA INTE	INTERFACE
1. 2.	œ	<b>H</b>	1.3.3	ROUTING AND TRANSMISSION	OPERATOR VOICE, VIDEO	1.5.1 CORE DATA INTE	INTERFACE
1.5	æ	H	1.3.3	ROUTING AND TRANSMISSION	COMMUNICATION RETRANSMISSION REQUEST	1.5.1 CORE DATA INTE	INTERFACE
1.5	œ	0	1.8.1	CORE DATA INTERFACE	OPERATOR VOICE, VIDEO	NAMAGEMENT 1.3.3 ROUTING AND IR	TRANSHISSION

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NO RND PROCESS NAME	ROUTING AND TRANSHISSION	ROUTING AND TRANSMISSION	ROUTING AND TRANSHISSION	CORE DATA CAPTURE	DISPLAYS AND COURSE		DISPLAYS AND CONTROLS	CORE DATA INTERFACE	CORE DATA PROCESSING	CORE DATA CAPTURE		CORE DATA INTERFACE MANAGENENT	CORE DATA INTERFACE	DATA TOTAL	SUPPORT CUSTOMER SYSTEM	OPERATION CHECK NEDS NERVICE		VALIDATE PAYLOAD COMMANDS	/DATA	OPERATION	CHECK SCHEDULE CONFLICTS	CHECK SCHEDULE CONFLICTS	OPERATE CORE SYSTEM		SUPPORT CUSTOMER SYSTEM	ACQUIRE REALTIME DATA		CALCA DOUG DERVICE	PROVIDE ANCILLARY DATA	SEQUENCE OPERATIONS	MAINTENANCE AND REPAIR	CHECK SEDS SERVICE	REQUIREMENTS VALIDATE CORE COMMANDS/	DATA Support Customer System
and Process no	1.3.3	1.3.3	1.3.3	1.5.8	4.80		1.8.4	1.8.1	1.8.3	1.5.8	1.5.4	1.5.1	1.8.1		o es	G,	)   	1.8	9	<b>:</b>	u.u.n	8. B.	o. <b>•</b>		ec.	1.1.1	Ġ	s e	<b>₽</b> .α	es T	4.3.5.1	es es	æ.	os os
DATA FLOW HESSAGE	COMMUNICATION Retransmission request	CORE DATA	OPERATOR VOICE, VIDEO	COMMUNICATION CORE DATA	OPERATOR VOICE. VIDEO		OPERATOR VOICE, VIDEO COMMUNICATION	CORE DATA	OPERATOR REALTIME DATA	OPERATOR REALTIME DATA	CORE	OPERATOR VOICE, VIDEO COMMUNICATION	OPERATOR VOICE, VIDEO	CONTRACTOR TATA	STATUS	VALID PAYLOAD COHMANDS		VALID PAYLOAD COMMANDS	VALID CHRICKEN / OPERATOR	CONTROL COMMANDS, DATA	PAYLOAD COMMANDS TO SEDS	VALID OPERATOR COMMANDS	NOW-RESTRICTED CORE COMMANDS,	VALID CORE DATA	AKCILLARY DATA	OMV, OTV STATUS	BOSTABROOM BETTER STATE OF TAX	CONTROL COMMANDS DATA		PATLOAD COMMANDS	SSPE MAINTENANCE AND Servicing Procedures	PAYLOAD COMMANDS TO SEDS	SERVCES VALID OPERATOR COMMANDS	PAYLOAD COMMANDS
PROCESS WAME	MANAGEMENT Core data interface Management	CORE DATA INTERFACE	CORE DATA INTERFACE	GARE DATA INTERFACE	MANAGEMENT Core data interface	PENENT	CORE DATA INTERFACE MANAGEMENT	CORE DATA CAPTURE				DISPLAYS AND CONTROLS	DISPLAYS AND CONTROLS	DISPLAYS AND CONTROLS		VALIDATE PAYLOAD COMMANDS		CHECK SSDS SERVICE PEGHIPPENTS	CHECK SEDS SERVICE	REQUIREMENTS	CHECK SSDS SERVICE PECHIPPENTS	VALIDATE CORE COMMANDS/	DATA VALIDATE CORE COMMANDS/	DATA	PROVIDE ANCILLARY DATA	SUPPORT CUSTOMER SYSTEM	OPERATION	NES.	SUPPORT CUSTONER SYSTEM	OPERATIONS Support Customer System	SSPE CHECKOUT AND SERVICING	CHECK SCHEDULE CONFLICTS	CHECK SCHEDULE CONFLICTS	SEQUENCE OPERATIONS
PROCESS	1.5.1	1.8.1	1.5.1	1.8.1	1.8.1	-	1.5.1	1.5.2	1.5.2	1.5.3	100	# · o · T	1.8.4	4.8.4		1.8		cs cs	Q,	! !	Ož Ož	e 10	es Es		æ. ♣.	es es	e a	ì	68 80	es 80	œ œ	3.3.8	ນ ຜ	<b>a</b> . <b>b</b>
I O MODE	0	н	H	0	0	4	H	н	0	н	0	<b>5</b>	<b>H</b>	н	H	0		H	0	ı	0	0	0		0	0	-	•	H	<b>H</b>	<b>+</b>	-	н	0
LEVEL	œ	œ	œ	æ	œ	1	CS.	œ	œ	œ	Ož (	<b>X</b>	œ	q	-	-		-	-	ı	-	-	-		н	-	-		~	-	-1	-	п	-
FUN NO LE	1.8	1.5	1.5	1.5	1.5	1	n. 	1.8	1.5		י מו	o .	1.5		0.0	0.0		0.8	0.8	1	0.8	0.8	0.8		O.	0.8	c	) i	0.0	0.8	o.	0.8	0.8	0.

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SMD PROCESS MO SMD PROCESS NAME	8.3 VALIDATE CORE COMMANDS/	DATA 8.6 SSPE CHECKOUT AND	SERVICING	AUTHORIZE	8.3.1 AUTHORIZE OPERATOR	4.0 OPERATE CORE SYSTEM	5.1.3.2 COMMAND INTERFACE	2.3.2 AUTHORIZE OPERATION	8.3.8 AUTHORIZE OPERATION		8.3.8 AUTHORIZE OPERATION	8.5.3 SUPPORT OTV OPERATIONS	SUPPORT OHV	¥	OFFICATIONS  8.5.3 SUPPORT OTV OPERATIONS		A.S.4 SUPPORT ONV OPERATIONS	8.5.4 SUPPORT ONV OPERATIONS			8.5.8 CUSTOMER PAYLOAD		8.8 CHECK PAYLOAD COMMAND		8.5.1 COBIONER DATA PROCESSING	3.4.1 SEQUENCE PAYLOAD		۲.	8.8 CHECK PAYLOAD COMMAND RESTRICTION/CONSTRAINT	1.1.1 ACQUIRE REALTIME DATA	8.8 CHECK SSDS SERVICE	8.8 CHECK PAYLOAD COMMAND	RESTRICTION/CC	3.4.8 SEQUENCE CORE SYSTEM OPFRATIONS	8.5.8 CUSTOMER PAYLOAD	OPERATION	8.5.4 SUPPORT OMV OPERATIONS	2.5.3.5 OTV STATUS REPORT
DATA FLOW MESSAGE	NOW-RESTRICTED CORE COMMANDS,	VALLD COKE DAIA SSPE MAINTEMANCE AND SERVICE	PROCEDURES	OPERATOR AUTHORIZATION	VERMICH AUTHORITOR VALID OPERATOR COMMANDS	MOM-RESTRICTED CORE COMMANDS, VALID CORE DATA	FACILITIES COMMANDS	VALID OPERATOR COMMANDS	NON-RESTRICTED CORE COMMANDS,		FACILITIES CORPANDS	OTV PAYLOAD STATUS	ONV PAYLOAD STATUS	VALID CUSTOMER/OPERATOR	OT CONTROL		OHV CONTROL	OHV CONTROL REQUESTS	* B * 6 5 5 8 * B * C * C * C * C * C * C * C * C * C	ABCILLARK BIRICO DAIA			VALID CUSTOMER/OPERATOR CONTROL COMMANDS DATA	SOCIETY CONTINUES DATE	sychologic Celebrating Parts	VALID, EXECUTABLE OPERATING		OTV PAYLOAD STATUS	OIV COMINGE		OHV CONTROL REQUESTS	OHV CONTROL		OHV PAYLOAD COMMANDS	VALID, EXECUTABLE OPERATING		ONV PAYLOAD COMMANDS	OIV, PAYLOAD STATUS
PROCESS NAME	OPERATE CORE SYSTEMS	MAINTENANCE AND REPAIR	20	AUTHORIZE OFERATOR	OPERA	AUTHORIZE OPERATION	AUTHORIZE OPERATION	CHECK RESTRICTED/	OPERATE CORE SYSTEM	ACTUBLES CREEKOS	PROCESSING	ALTIM	ALTIM	CHECK SSDS SERVICE	CHECK SEDS SERVICE	REQUIREHENTS	CHECK SSDS SERVICE REQUIREMENTS	CHECK SEDS SERVICE	PROUTER ANDTHIABY DATA	CHRICHER DATA PROCESSIEG	Ä		CUSTOMER PAYLOAD OPERATIONS	CHRICKER PAVIOAN	OPERATIONS	CUSTOMER PAYLOAD		SUFFORT OTV OFFRATIONS	10 10	<b>OMO</b>	SUPPORT OMV OPERATIONS	SUPPORT OMV OPERATIONS		SUPPORT ONV OPERATIONS	SEQUENCE PAYLOAD	OPERATIONS	SEQUENCE CORE SYSTEM OPERATIONS	ACQUIRE REALTIME DATA
PROCESS	€.0	4.3.5.1	•	3 C	j	05 13. 05	85 85 85	3.3.8	₽.0			1.1.1	1.1.1	cs cs	os os		CE CE	œ œ	ď	, c	2.8.1	1	os eo:	40	•	85 50 68	•		•	2. S. 4	æ. æ.	4.5.5	1	æ. 10.	3.4.1		a. <b>4</b> . a	1.1.1
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EVEL	-	-	(	X a	2 C2	CE .	C\$	œ	œ	c	e	O\$	œ	Œ	æ		æ	œ	C	<b>2</b> 02	O CE		CS.	Q	}	œ	c	ne c	•	œ	œ	æ	1	œ	œ		œ	ຄ
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AND PROCESS NO AND PROCESS NAME	8.5.3.8 OIV CHECKOUT/DIAGNOSTICS 8.5.3.1 OIV SERVICING 4.1.4.3 SCHEDULE DEPLOYMENT/	RENDEZVOUS 8.8 CHECK PAYLOAD COHHAND BEGININGS	1	8.5.3.3 OIV DEPLOYHENT RETRIEVAL	8.5.4.6 OHV STATUS REPORT 8.5.4.4 REMOTE OPERATIONS CONTROL		8.5.4.5 OMV OPERATION	8.5.4.8 ONV CHECKOUT/DIAGNOSTICS	- 1	DEEVO	*:* CHECK PAYLOAD COMMAND RESTRICTION/CONSTRAINT	8.8 CHECK PAYLOAD COMMAND	3.4.8 SEQUENCE CORE SYSTEM		1.1.1 CAFTURE REALTIME DATA 8.5.4.5 ONV OPERATION		8.5.4.3 OHV DEPOYMENT/RETRIEVAL	3.3 DEVELOP OPERATING EVENTS	SCHEDULE	S.S DEVELOR OFEKATING EVENTS SCHEDULE	3.3 DEVELOP OPERATING EVENTS	SCHEDULE 3.3 DEVELOP OPERATING EVENTS	SCHEDULE	8.8 CHECK SEDS SERVICE	8.3.8 VALIDATE OPERATION	3.8 DEVELOP SHORT TERM	SCHEDULES	3.2 DEVELOP SHORT TERM	4.0 OPERATE CORE SYSTEMS		3.4 SEQUENCE OPERATIONS	3.2.2 INCORPERATED NEW/REVISED	3.8.3 CHECK FOR CONFLICTS	3.2.1 CONFIRM PAYLOAD AND CORE
DATA FLOW MESSAGE	SERVICING DATA SERVICING DATA OTV, OTHER RELATIVE STATE	PAYLOAD, OTV CONTROL		OT BER 1	OMV PAYLOAD STATUS OMV CONTROL REQUESTS	8	CHY CORING.	SERVICING DATA	SERVICING DATA			OMV CONTROL	OHV PAYLOAD COMMANDS			,	OHV, OTHER RELATIVE STATE	PAYLOAD COMMANDS TO SEDS	NEKVICES Ualit obesations commands	TIT OFFICE COMPANDS	COMMANDS REQUIRING	RESOLVED COMMANDS		PAYLOAD COMMANDS TO SSDS	VALID OPERATIONS COMMANDS	COMMANDS REQUIRING	NEGOTIATION	RESOLVED COMMANDS	VALID, EXECUTABLE CORE		VALLU, EAECUIABLE CORE Commands	NEW/REVISED OPERATIONS	BASELINE SCHEDULE	NEW/REVISED OPERATIONS
PROCESS NAME D	OTV SERVICING OTV CHECKOUT/DIAGNOSTICS SI OTV DEPLOYMENT RETRIEVAL O	OTV OPERATION PA	OTV STATUS	/ T W T G	ACQUIRE REALTIME DATA OR CHECK SSDS SERVICE		BELLATER TO THE STATE OF THE ST	SERVICING	ONV CHECKOUT/DIAGNOSTICS SI	TOSTROY SMOTTAGES AT		OHV OPERATION ON	OMV OPERATION OH	NO SHEVEN CHO	STATUS JENCE CORE SYSTEM	2	SCHEDULE DEPLOYMENT/ ON RENDEZVOUS	ERVICE	REQUIRERENTS  VALIDATE OPERATION  VA		DEVELOP SHORT TERM CO	HORT TERM	Ø	DEVELOP OPERATING EVENTS PA	OPERATING EVENTS	SCHEDULE DEVELOP OPERATING EVENT CO	ш́	DEVELOP OPERATING EVENTS RESCHEDULE	OPERATIONS	OD SMARSS HOOD HE VOLGO	o reup	CONFIRM PAYLOAD AND CORE NE	AYLOAD AND CORE	TE NEW/REVISED
PROCESS	8 8 8 8 8 8 8 8 8 8 8 8 8 4 8 8	8.5.3.4 4.5.3.4	8.8.3	•	1.1.1	o o	•	5.4.	05 04 40 40 05 50	•	! : :	8. G. 4. S	8.8.4.8	4		,	4.1.4.3	ca ca	er er	1	a a	a.	(	n n	<b>8</b> .8	n n		<b>10</b>	4.8	•	) •	3.2.1	3.2.1	8. 8.
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LEVEL	<b>ព</b> ព	ຄ	n		n n	t	9	<b>19</b>	nn	) E.	)	n	E)	<b>F</b>	9 19	•	n	-	-	1	-	-	•	-	-	-		-	-	-	•	Q	œ	œ
FUN NO	06 06 08 10 10 10 10 10 10	8. S. S.	03 0 10 10 10 11		og og or or or or or or		•	8.8. 4.0	25 00 10 10 4. 4.	, a		æ. æ. ♣	8. S.	E. α	. es		. io.	0. 0.	S.	<b>)</b>	o. n	a.o	1	0	3.0	3.0		0°0	3.0	£	) i	es es	g. 8	ы а

AND PROCESS NO AND PROCESS NAME	SCHEDULES 5.2.1 CONFIRM PAYLOAD AND CORE	3.8.4 CHECK FACILITIES	3.8.5 RESOLVE CONFLICTS		3.2.5 RESOLVE CONFLICTS		CHECK FOR	CABCH FOR FACILITIES	G.S.6 MAINTAIN SHORT HERM	SCHEDULES	3.3.8 CHECK SCHEDULE CONFLICTS	3.3.8 CHECK SCHEDULE CONFLICTS	3.2.5 RESOLVE COMFLICTS		CONTACTOR CONTACTOR	3.8.5 RESOLVE COMMANDS	3.3.8 CHECK SCHEDULE CONFLICTS		CHECK SCHEDULE	3.3.2 CHECK SCHEDULE CONFLICTS	3.3.8 CHECK SCHEDULE CONFLICTS	CRECK SCHEDULE		S.S.S MAINTAIN OPERATING EVENTS SCHEDULE	8.8 CHECK SEDS SERVICE	REGUIN	8.3.2 VALIDATE OPERATION	STOLISHOO TUTOSTO R O E	RESOLVE		3.3.1 TIME TAG OPERATIONS		3.3.1 TIME TAG OPERATIONS	5.3.4 ADJUST FOR UNSCHEDULED	MODE CHAN	S.S.S HAINTAIN OPERATING EVENTS SCHEDULE	3.4.3 COMMAND SCHEDULED MODE	R O R ADIEST TOS MEGALLETIN	MODE CH	3.3.4 ADJUST FOR UNSCHEDULED	HODE CHANGES 5.5.4 ADJUST FOR UNSCHEDULED
DATA FLOW HESSAGE	BASELINE SCHEDULE	SCHEDULE WITH COMFLICTS	RESOLVED SCHEDULE	WITH COMPLICTS	SCHEDULE WITH RESOURCES AND		RESOLVED SCHEDULE	HIII RESOURCES	VALIDATED, RESOLVED SCHEDULE			COMMANDS REQUIRING WEGOTIATION	VALIDATED, RESOLVED SCHEDULE	CHIGHTS STRANGO	MEGOTIATION	RESOLVED COMMANDS	PAYLOAD COMMANDS TO SEDS		COMMANDS BEOGRAPHOS	NEGOTIATION	RESOLVED COMMANDS	SCHEDULABLE OPERATIONS/	THE TERESTATION COMMAND	the three of the long	PAYLOAD COMMANDS TO SEDS		VALID OPERATION COMMANDS	RESOLVED COMMANDS			SCHEDULABLE OPERATIONS/	EMENTAT	IINE IAGGED OFERATIONS	REQUIRED CHANGES		KEYOTKED CHANGES	SCHEDULED CORE HODE CHANGES	HOTICE OF INSCHEDITED MODE	, , , , , , , , , , , , , , , , , , ,	SCHEDULED CORE HODE CHANGE	NOTICE OF UNSCHEDULED HODE
PROCESS NAME	OPERATION CHECK FOR CONFLICTS	CHECK FOR CONFLICTS	FOR CONFLI	FOR FACILI	CHECK FOR FACILITIES		MEDOLVE COMPLICES		RESOLVE CONFLICTS			RESOLVE CONFLICTS	MAINTAIN SHORT TERM	SCHEDULES CHECK SCHEDULE COMFLICTS		SCHEDULE C	CHECK SEDS SERVICE	MATTDATE OBESATION			RESOLVE CONFLICTS	TIME TAG OPERATIONS	TIME TAG OBEDATIONS			COMMANDS	CHECK RESTRICTION/COMBIR- AINT COMMANDS	CHECK SCHEDULE CONFLICTS				5	SCHEDULE	MAINTAIN OPERATING EVENTS	SCHEDULE	MODE CHANGES	ADJUST FOR UNSCHEDULED	ADJUST FOR UNSCHEDULED	MODE CHANGES	COMMAND SCHEDULED MODE	ADJUST FOR UNSCHEDULED
PROCESS	8. 8.	8.8.8	œ	œ (		C	) E.	1	3.8.5	(	100 100 100 100 100 100 100 100 100 100	8. 8.	8.8 8.0	8		3.3.8	os os	0	j a	) i	3. p. s	3.3.1	5	•	3.3.8		ы. В.	8. to .	3.5	6		t	?	3.3.3	*		a.a.4	4.6		a. <b>4</b> .¤	8. B. S
I O MODE	<b>H</b>	0	н	н (	0	•	<b>-</b>	)	0	(	0 1	<b>+</b>	н	0	ı	H	0	c	> -		0	н	c	•	H	1	H	H	0	•	>		4	<b>H</b>	c	•	<b>.</b>	0	ı	0	H
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FUN NO LEVEL	LEVEL	HODE	PROCESS	PROCESS NAME	DATA FLOW HESSAGE	RND PROCESS NO	NO SND PROCESS NAME
₩.	æ	H	65 80 68	MODE CHANGES CUSTONER PAYLOAD	CHANGES VALID, EXECUTABLE STATION	u. 4. n	MORE CHANGES SEQUENCE PAYLOAD
ď.	CS.	<b>H</b>	₹.8.8	ADJUST FOR UNSCHEDULED	FAXLOAD COMMANDS SCHEDULED CORE MODE CHANGES	u. 4. u	OPERATIONS COMMAND SCHEDULED CORE
a.	Œ	0	3.4.1	SEQUENCE PAYLOAD	VALID, EXECUTABLE STATION	es 80.	MODE CHANGES Customer Payload
<b>₩</b> .	CQ.	H	3.4.1	SEQUENCE PAYLOAD	FAYLOAD COMMANDS PAYLOAD OPERATIONS TO BE	4.4.8	OPERATIONS CHECK FOR EXECUTABILITY
<b>4</b> . ₩	æ	0	æ. <b>♣</b> .8	OPERATIONS SEQUENCE CORE SYSTEM	EXECUTED CORE HODE COMMANDS	87 4	COMMAND SCHEDITED MODE
	•	•	•				CHANGE
•	×	-	æ. 	SEQUENCE CORE SYSTEM OPERATIONS	CORE OPERATIONS TO BE EXECUTED	4.4.b	CHECK FOR EXECUTABILITY
₩.	œ	0	a. ♣.æ	SEQUENCE CORE SYSTEM	VALID, EXECUTABLE CORE	•·•	OPERATE CORE SYSTEMS
a. <b>4</b>	œ	•	3.4.3	COMMAND SCHEDULED MODE	SCHEDULED CORE MODE CHANGES	a.a.4	ADJUST FOR UNSCHEDULED
a. A	CE .	н	3.4.3	COMMAND SCHEDULED MODE	CORE HODE COMMANDS	t. ♣.	NODE CHANGES SEQUENCE CORE SYSTEM
<b>4</b> .	œ	0	4.4.	CHECK FOR EXECUTABLLITY	PAYLOAD OPERATIONS TO BE	3.4.1	OPERATIONS SEQUENCE PAYLOAD
4.5	œ	0	3.4.4	CHECK FOR EXECUTABILITY	EXECUTED CORE OPERATIONS TO BE	4	OPERATIONS NEGITABLE CORP. NAMED
•	c		•		EXECUTED		
; E-6	3	-	• •	OFEMALE COME SYSTEMS	VALID, EXECUTABLE CORE COMMANDS	a. ♣.	SEQUENCE CORE SYSTEM OPERATIONS
o. ₹	-	0	<b>4</b> .1	OPERATE GN & C SYSTEM	CORE AVIONICS DATA	4.4	PROVIDE CUSTOMER AVIONICS
€.0	-	<b>H</b>	<b>♣</b> 63	OPERATE HON-GH & C CORE	RECONFIGURE, DISCONNECT	5.1.2.6	•
€.0	-	н	4.4	PROVIDE CUSTOMER AVIONICS	CORE AVIONICS DATA	4.1	PAYLOAD/CORE SYSTEM OPERATE GN & C SYSTEM
•	-	•	9	SERVICES BECOMMENTATION AND SOCIETY		,	
) i	•	•	•	PAYLOAD/CORE SYSTEM	RECOMPTENEE, DISCONNECT	♣ cs	OPERATE NON-GN & C CORE SYSTEMS
<b>4</b> .1	æ	<b>.</b>	oi ro	SUPPORT CUSTOMER SYSTEM OPERATION	OMV, OTV STATE	4.1.4	TRAFFIC CONTROL
4.1	æ	0	3.4.2	SEQUENCE CORE SYSTEM	REBOOST	4.1.8	GUIDANCE
4.1	Qį	0	3.4.8	SEQUENCE CORE SYSTEM	VALID EXECUTABLE ATTITUDE	4.1.3	ATTITUDE CONTROL
4.1	Q	H	4.1.2	OPERATIONS GUIDANCE	COMMANDS REBOOST	to 4.	SECUTION CORE SASTEM
,	(	•					OPERATIONS
7.7	N2 00	<b>&gt;</b> -	• • • •	GULDANCE	PATH VELOCITY COMMANDS	£.1.3	ATTITUDE CONTROL
4.1	Q	0	4.1.2	GUIDANCE	MANEUVERS	# T T T	TRAFFIC CONTROL
4.1	cs	н	4.1.3	ATTITUDE CONTROL	VALID EXECUTABLE ATTITUDE	8.4.8	SEQUENCE CORE SYSTEM
4.1	æ	H	4.1.3	ATTITUDE CONTROL	COMMANDS Path Velocity Commands	9	OPERATIONS CHITAMET
<b>4</b> .1	Ož	0	•	TRAFFIC CONTROL	OTV STATE	2 1 10 1 02	SUPPORT CUSTOHER SYSTEM
4.1	œ		4.1.4	TRAFFIC CONTROL	MANEUVERS	4.1.8	GUIDANCE
r.	Ož (	0 0	4.1.4		COLLISION AVOIDANCE	4.1.2	GUIDANCE
# # # #	03 G	o <b>-</b>	4.1.4	TRAFFIC CONTROL	RANGE BETATIVE BOSTHION VELOCIES	4 ·	TRACKING
4.1	1 03	. 0		L C	POSITION,	4.1.4 0.4.6	IRACKING IRAFFIC CONTROL

	S NO SHD PROCESS WANT		4 ATTITUDE DETERMINATION		DETERMINE POINTING MOUNT CONTROLS		DETERMINATION  REBOOST/REENTRY TARGETING	S COLLISION CHECK			DETERMINE EPHEMERIDES	-	DELLERGIAGION REBOOST/REENTRY TARGETING	TETHER CONTROL	DETERMINE PINTING MOUNT		COLLISION CHECK	SEQUENCE CORE SYSTEM	OFERALIONS MANIGATION STATE PROPAGA-		COLLISION		REBOOKT/MANEUVER TETHER CONTROL		TIOM TABLES TABLES TABLES	ET COLLISION	ANCE TARGET COLLISION AVOID-	ANCE MANTHURB COORTINATION			SEQUENCE CORE SYSTEM OPERATIONS	MANEUVER COORDINATION
	SHD PROCESS HO	4.1.4	4.1.1.	4.4.1.1	4.1.8.6	4.1.1.1	4.1.8.1	4.1.8.3	4.1.1.5	4.1.1.8	4.1.1.3	4.1.1.1	4.1.8.1	4.1.8.5	4.1.8.6	4.1.8.1	4.1.8.3	3.4.8	4.1.1.5	4.1.8.8	4.1.8.3	4.1.8.1	4. 1. 4. 1. 1. 10. 11. 10. 10. 10. 10. 10. 10. 10	4.1.1.8	4.1.8.1		4.1.4.5	4	4.1.3.1	4.1.3.3	or •	4.1.2.2
:	DATA FLOW HESSAGE	RANGE		UPDATED MAVIGATION STATE	POINTING COORDINATES, RAIES		VELOCITY INCREMENT SCHEDULES	PROJECTED STATE HISTORY	VELOCITY INCREMENT SCHEDULE	PROJECTED STATE HISTORY	POINTING COORDINATES, RATES	UPDATED MAVIGATION STATE	VALID, EXECUTABLE MANEUVER COMMAND	EXECUTABLE TETHER CONTROL	POINTING COORDINATES, RATES	VELOCITY INCREMENT SCHEDULE	PROJECTED STATE SCHEDULE	VALID, EXECUTABLE MANEUVER	VELOCITY INCREMENT SCHEDULE	VALID MANEUVER	RETARGETING REQUIREMENT	VALID MAMEUVER	TETHER MANEUVER DATA	PROJECTED STATE SCHEDULE	RETARGETING REQUIREMENT	COFLIER MANEUVER REQUIREMENTS	STATION AVOIDANCE MANEUVER	HANEUVER COMMAND	DELTA VELOCITY COMMANDS	DELTA VELOCITY COMMANDS	EAECGIABLE LEIMEN CONINGL	TETHER MANEUVER DATA
	PROCESS NAME		BEACECRAFI STATE/ORBIT DETERHINATION	SPACECRAFT STATE/ORBIT DETERMINATION	DETERMINES EPHENERIDES	ATTITUDE DETERHIMATION	MAVIGATION STATE	MAVIGATION STATE	REBOOST/REENTRY TARGETING	COLLISION CHECK	DETERMINE POINTING MOUNT	GROUND TRACK DETERMINATION	SEQUENCE CORE SYSTEM	SEQUENCE CORE SYSTEM	DETERMINE EPHEMERIDES	MAVIGATION STATE	MAVIGATION STATE PROPOGATION	REBOOST/REENTRY TARGETING	REBOOSI/REENTRY TARGETING			MANEUVER COORDINATION MANEUVER COORDINATION		COLLISION CHECK	COLLISION CHECK	COLLISION CHECK	COLLISION CHECK	REBOOST/MANEUVER	REBOOST/HANEUVER	REBOOST MANEUVER		TETHER CONTROL
	MOCERN	4.1.5	7 - 7 - 7 - 2	4.1.1.1	4.1.1.3	4.1.1.4	4.1.1.8	4.1.1.5	4.1.8.1	4.1.2.3	1.1.2.6	1.4.1.1	a. ♣. æ	3.4.8	4.1.1.3	4.1.1.5	1.1.1.6	1.1.2.1	1.1.8.1	1.8.1		08 CC		1.8.3	.1.2.3	.1.2.3	.1.2.3	1.2.4	4.1.2.4	4.1.20.4		4.1.2.5
	HODE	H (	>	0	•	H	<b>H</b>	•	•	н	н	н	0	0	•	н	•	<b>→</b>	•	•	<b>*</b> •	• •	4	<b>4</b>	•	•	<b>#</b>	<b>+</b>	•	0+		•
	1	æ	3	n	n	ຄ	n	10	n	n	ຄ	n	8	ຄ	ю	ຄ	n	ຕ	ຄ	ю :	n :	9 K	8	<b>89</b>	ы	89	ຄ	ກ	n	ខេត		ກ
		4.1		4.1.1	4.1.1	4.1.1	4.1.1	4.1.1	4.1.1	4.1.1	4.1.1	4.1.1	4.1.8	4.1.8	e: -70	4.1.8	4.1.2	4.1.8	4.1.3	4.1.8	-	4		4.1.2	4.1.8	4.1.8	4.1.2	4.1.2	<b>↑</b> 1. 3.	4 4		<b>4</b> .1. <b>4</b>

NO RND PROCESS NAME	DETERMINE EPHEMERIDES POINTING MOUNT CONTROL	POWER SOURCE HANAGEMENT	POWER SOURCE HANAGEMENT	COMMUNICATION INTERFACE	CONTROL RELATIVE ALIGNMENT	PETERGIAGIANA REBOOST MANEUVER	REBOOST MANEUVER	a a cano		DETERMINE POINTING HOUNT	CONTROLS DETERMINE POINTING HOUNT	CONTROLS DETERMINE POINTING HOUNT	CONTROLS DETERMINE POINTING MOUNT	CONTROLS ATTITUDE AND TRANSLATION	CONTROL ATTITUDE AND TRANSLATION	CONTROL Momentum Management Pointing Mount Control	1400	OPERATIONS		EFFECTOR CONTROL	MONENTUM MANAGEMENT	ATTITUDE AND TRANSLATION	CONTROL REBOOST MANEUVER ATTITUDE AND TRANSLATION		CONTROL SCHEDULE DEPLOYMENT/	RENDEZVOUS SCHEDULE DEPLOYMENT/ RENDEZVOUS
SND PROCESS WO	4.1.1.3	4.8.1.3	4.8.1.3	4.2.5.6	4.4.1.4	4.1.8.4	4.0.0.4	4	4. I. S.	4.1.8.6	4.8.1.6	4.1.8.6	4.1.2.6	4.1.3.1	4.1.5.1	4.4.4.8.8.8.8.8.4.8.	15 4		4.1.8.4	4.1.3.8	4.1.3.3	4.1.3.1	4.1.8.4	4.1.8.6	4.1.4.3	4.1.4.8
DATA FLOW HESSAGE	POINTING COORDINATES RATES GIMBAL POSITION, RATE	GIMBAL POSITION	GIMBAL CHANGE REQUESTS	POINTING COORDINATES	MAST ALIGNMENT	DELTA VELOCITY COMMANDS	DELTA VELOCITY COMMANDS GINBAL POSITION, RATE		COFLIER MANEUVER REQUIREMENTS	GIMBAL CRAMGE REQUESTS	POWER SOURCE MANAGEMENT	POINTING COORDINATES	MAST ALIGNMENT	VALID, EXECUTABLE ATTITUDE	CORRANDS DELTA VELOCITY COMMAND	DELTA VELOCITY COMMAND GIMBAL POSITION, RATE		COMMANDS	DELIA VELOCIIY COHHAND	ATTITUDE TRANSLATION COMMANDS	REBOOST ATTITUDE, TORQUE	ATTITUDE TRANSLATION COMMANDS	DELTA VELOCITY COMMAND REBOOST ATTITUDE, TORQUE	GIMBAL POSITION, RATE	OTV MAVIGATION STATE	OHV MAVIGATION STATE
PROCESS NAME	POINTING HOUNT CONTROL DETERMINE POINTING HOUNT	DETERMINE POINTING MOUNT CONTROLS	DETERMINE POINTING MOUNT	DETERMINE POINTING MOUNT	DETERMINE POINTING HOUNT	ATTITUDE AND TRANSITION CONTROL	HONENTUM MANAGEMENT POINTING MOUNT CONTROL	TARGET COLLISION	AVOIDAMCE TARGET COLLISION	AVOIDANCE Power Source Hanaghert	POWER SOURCE MANAGEMENT	COMMUNICATION INTERFACE	RELATIVE ALIGNMENT	SEQUENCE CORE SYSTEM	REBOOST MANEUVER	REBOOST MANEUVER DETERMINE POINTING MOUNT	CONTROLS ATTITUDE AND TRANSLATION	CONTROL AND DESCRIPTION	7	AIIIIUDE AND IRANSLATION CONTROL	ATTITUDE AND TRANSLATION	EFFECTOR CONTROL	HOHENTUH MANAGEMENT Homentum management	POINTING HOUNT CONTROL	OTV DEPLOYMENT/RETRIEVAL	OHV DEPLOYHENT/RETRIEVAL
PROCESS	4.1.2.6 4.1.2.6	1.1.2.6	1.1.2.6	1.1.2.6	4.1.2.6	1.1.3.1	4.1.3.3	1.1.4.5	1.4.8	4.8.1.3	. 8.1.3	1.2.5.6	4.1.4	3.4.2	1.2.4	1.2.4	.1.3.1		•	7.0.1.	.1.3.1	1.3.2	1.3.3	1.3.4	8.5.3	&. ₽. ₽.
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LEVEL	ຄຄ	n	n	ю	ю	ຄ	ពព	n		ю	n	ຄ	ຄ	ຄ	ຄ	n n	ຄ	Ľ			ы	n	ពព	n	n	<b>n</b>
FUN NO LE	4.1.2	4.1.2	4.1.2	4.1.8	4.1.2	4.1.8	<b>4</b> .1.8	4.1.2	4.1.8	4.1.8	4.1.8	e: <b>F</b> -7	4.1.8	4.1.3	4.1.3	4.1.4 5.1.3	4.1.3		) !	3	4.1.3	4.1.3	4.1.3	4.1.3	4.1.4	4.1.4

FUN NO LEVEL	EVEL	I O MODE	PROCESS	PROCESS NAME	DATA FLOW HESSAGE	SND PROCESS 1	NO RND PROCESS NAME
4.1.4	n	H	4.1.2.3	COLLISION CHECK	STATION MANEUVER REQUIRENTS	4.1.4.5	TARGET COLLISION
4.1.4	n	0	4.1.8.3	COLLISION CHECK	COFLIER MANEUVER REQUIRENERS	4.1.4.8	AVOIDANCE TARGET COLLISION
4.1.4	ຄ	H	4.1.4.1	COMPUTE/PROPAGATE COMS- TELLATION BELATIVE STATE	VELOCITY INCREMENT SCHEDULE	4.1.4.8	AVOIDANCE MANAGE CONSTELLATION
4.1.4	ຄ	0	4.1.4.1		CURRENT, PROJECTED STATE	4.1.4.3	SCHEDULE DEPLOYMENT/REN-
4.1.4	n	•	4.1.4.1	COMPUTE/PROPAGATE CONST-	OBJECT RELATIVE STATE	4.1.4.4	MANAGE RENDEZVOUS
4.1.4	n	<b>H</b>	4.1.4.1	GATE	VELOCITY INCREMENT SCHEDULE	4.1.4.4	MANAGE RENDEZVOUS
4.1.4	B	0	4.1.4.1	COMPUTE/PROPAGATE CONS- TELLATION RELATIVE STATE	MANEUVER PLAN	4.1.4.5	TARGET COLLISION AVOID-
4.1.4	n	н	4.1.4.1	COMPUTE/PROPAGATE CONST-	RANGE, RATE, DIRECTION OBJECT	4.1.5.4	THACKING DATA CONDITION-
4.1.4	n	0	4.1.4.8	MANAGE CONSTELLATION OBST WANTHVES	IDERITE ICATION VELOCITY INCREMENT SCHEDULE	4.1.4.1	COMPUTE/PROPAGATE CONS-
4.1.4	ຄ	<b>H</b>	4.1.4.8	MANAGE CONSTELLATION ORBIT MANEUVERS	RETARGETING REQUIREMENTS	4.1.4.5	TARGET COLLISION AVOID-
4.1.4	n	0	4.1.4.3	ILE DEPL	OTV HAVIGATION STATE	8. W. W.	ANCE OTV DEPLOYMENT RETRIEVAL
<b>4.1.</b> ♣	n	•	4.1.4.3	DEZVOUS SCHEDULE DEPLOYMENT REM-	OMV MAVIGATION STATE	8. a.	OHV DEPLOYHENT/RETRIEVAL
<b>.</b> -72	8	-	4.1.4.3	SCHEDULE DEPLOYMENT REN-	CURRENT, PROJECTED STATE	4.1.4.1	COMPUTE PROPAGATE CONS-
4.1.4	· 10	0	4.1.4.4	MANAGE RENDEZVOUS	VELOCITY INCREMENT SCHEDULE	4.1.4.1	
4.1.4	n	<b>H</b>	4.1.4.4	MANAGE RENDEZVOUS	OBJECT RELATIVE STATE	4.1.4.1	COMPUTE/PROPOGATE CONST-
4.1.4	n	н	4.1.4.4	MANAGE RENDEZVOUS	RETARGETING REQUIREMENTS	4.1.4.5	TARGET COLLISION
4.1.4	ខេត	00	4.1.4.4	MANAGE RENDEZVOUS TARGET COLLISION AVOID-	RANGE, DIRECTION FORECAST STATION MANTHURE BEGHIDENTED	4. 4. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5.	AVOIDANCE PROXIMITY TRACKING
4.1.4	<b>8</b>	н	•	COLLISION	MANEUVER	4. 1. 8. 1. 1. 8. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	COLLISION CHECK
4.1.4	n	н	4.1.4.8	ANCE TARGET COLLISION AVOID-	MAKEUVER PLAN	4.1.4.1	COMPUTE/PROPAGATE CONS-
4.1.4	ຄ	0	4.1.4.5	TARGET COLLISION AVOID-	RETARGETING REQUIREHENTS	4.1.4.8	-
4.1.4	ຄ	0	4.1.4.5	AMCE TARGET COLLISION AVOID-	RETARGETING REQUIREHENTS	4.1.4.4	ORBIT MANEUVERS MANAGE RENDEZVOUS
4.1.4	ຄ	н		Ď,	DIRECT	4.1.4.4	MANAGE RENDEZVOUS
4.1.4	n	0	4.1.5.4	TRACKING DATA CONDITION- ING	RANGE, RAIE, DIRECTION OBJECT IDENTIFICATION	4.1.4.1	COMPUTE/PROPAGATE CONST- FILATION RELATIVE STATE
4.1.5	ຄ	H	4.1.4.1	COMPUTE/PROPOGATE CONST- ELLATION RELATIVE STATE	RANGE, RATE DIRECTION, OBJECT IDENTIFICATION	4.1.5.4	DATA
2. i. 4 8. i. e	សព	0 -	4.1.4.4		RANGE, DIRECTION FORECAST	4. 4. 10. 1	PROXIMITY TRACKING
	<b>n</b>	. 0				4.8.1	OBSECT CAIALOGUE MAINTEN- ANCE TRACKING DATA CONDITION-
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PROCESS NO SND PROCESS NAME	•	٦.		۲.	TRACKING .5.2 PROXIMITY TRACKING	4.1.6.5 COMMAND INTERFACE	PROCESSING 4.1.6.5 COMMAND INTERFACE	PROCESSING 4.1.6.5 COMMAND INTERFACE	PROCESSING 4.1.6.5 COMMAND INTERFACE	4.1.6.5 COMMAND INTERFACE	PROCESSING 4.1.6.5 COMMAND INTERFACE	PROCESSING AUTHORIZE OPERATION	SEQUENCE OPERATIONS	6.1 TIME-SOURCE MANAGEMENT	6.8 TIME UPDATE		HENT 6.4 DEVICE HANAGEHENT		PAYLOAD, CORE SYSTEM 1 OFERATE POWER SYSTEM	œ	DISTRIBUTION 1.3 POWER SOURCE MANAGEMENT	1.3 POWER SOURCE HANAGEHENT	1.5 PROJECT ENERGY AVAILABLE	1.5 PROJECT ENERGY AVAILABLE	S TROUTENESS S	OPERATIONS	1.3 POWER SOURCE MANAGEMENT	1.3 POWER SOURCE MANAGEMENT
RND PRO	4.1.5	4.1.8	4.1	4.1.5	4.1.8	4.1	4.1	₽.1	4.1	<b>4</b> .3	4.1	e: 	<b>9</b> .	4.1.6.1	4.1.6.8	4.1.6.3	4.1.6.4	5.1.	4.8.1	4.8.1	4.8.1.3	4.8.1.3	4.8.1.5	4.2.1.5	10 4		₩.	4.8.1
DATA FLOW HESSAGE	OBJECT IDENTIFICATION	OBJECT TRACK LIST	RANGE, RAIE, DIRECTION OBJECT	DEFECT IDENTIFICATION	OBJECT IDENTIFICATION	COMMAND, DATA	CORE COMMANDS	SOURCE SELECTION COMMAND	UPDATE REQUEST	SOURCE SELECTION COMMAND	SEQUENCE, STATUS REQUEST	COMMAND, DATA	CORE COMMANDS	SOURCE SELECTION COMMAND	UPDATE REQUEST	SOURCE SELECTION COMMAND	SEQUENCE, STATUS REQUEST	RECONFIGURE, DISCONNECT	RECONFIGURE, DISCONNECT	LOAD CONNECTION	GIMBAL POSITION	GIMBAL CHANGE REQUESTS	REFERENCE OUPUT	POWER	LOAD CONNECTION		ELECTRICAL LOAD FORECAST, ABNORMAL POWER CONDITION	
PROCESS NAME	PROXIMITY TRACKING	OBJECT CATALOGUE MAINTEN-	TRACKING DATA CONDITION-	TRACKING DATA CONDITION-	TRACKING DATA CONDITION-	ING VALIDATE CORE COMMANDS	SEQUENCE OPERATIONS	TIME-SOURCE MANAGEMENT	TIME UPDATE	FREQUENCY SOURCE MANGE-	DEVICE MANAGEMENT	COMMAND INTERFACE PROCESSING	COMMAND INTERFACE	COMMAND INTERFACE	COMMAND INTERFACE	COMMAND INTERFACE	COMMAND INTERFACE	OPERATE POWER SYSTEM	URE/DISC	FALLOAD, CORE SYSTEM SEQUENCE CORE SYSTEM OBEDATIONS	DETERMINE POINTING HOUNT	DETERMINE POINTING HOUST	EVALUATE ARRAY	FERFURBANCE Evaluate array	PERFORMANCE CONFIGURE POWER DISTRIBU-	MOIL	CONFIGURE FOWER DISTRIBUTION	CONFIGURE POWER DISTRIBUTION
PROCESS	1.1.5.8	.1.8.3	.1.5.4	1.5.4	4.1.5.4	8.3.8	3.4.8	4.1.6.1	.1.6.8	.1.6.3	1.8.4	.1.6.5	1.6.5	4.1.6.5	.1.6.5	.1.6.5	4.1.8.5	4.8.1	5.1.2.6	ŭ. <b>≜</b> . છ	.1.2.6	4.1.2.6	.2.1.1	.8.1.1	4.8.1.8	•	os  cs	4.2.1.8
I O P	•	•	•	<b>+</b>	# H	•	0	<b>#</b>	<b>+</b>	# H	<b>→</b>	# H	H H	•	•	•	•	<b>+</b>		р О	•	. <del>.</del>	H	•	-	•	*	
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FUN NO LEVEL	4.1.5	4.1.5	4.1.5	4.1.5	4.1.5	4.1.6	4.1.6	4.1.6	4.1.6	4.1.6	4.1.6	4.1.6	9.1.€	9 11 4 73	4.1.6	4.1.8	4.1.6	<b>♣</b> Ø:	<b>4</b> .	4.8.1	4.8.1	4.8.1	4.2.1	4.8.1	4.8.1		 ×: •	<b>♣</b> .03 .14

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COMMUNICATION REQUIREMENT   COMMUNICATION AND NUMBER   COMMUNICATION AND	202		4	PROCESS NAME	DATA FLOW MESSAGE	SND PROCESS	HO BND PROCESS NAME
1			6. 8.	COMPUNICATION	COMMANDS CONTROL SIGNAL RESPONSE	4. 0. 0. 0.	RECOVERY COMMUNICATION EQUIPMENT
1	<b>4</b> .8.5		4. 8.		FAILURE INDICATOR	•	FAILURE DETECTION AND
	4.8.5		4.8.5.	DETECTION		10	COMMUNICATION EQUIPMENT
1	4.2.5		4. 8. 8.	HOI	FAILURE INDICATOR	4.2.5.3	CONTROL COMMUNICATION EQUIPMENT
1	ĸ.		<b>4</b> . 83 . 93 .	DETECTION	RECOVERY PROCEDURE	. to	STATUS MONITORING COMMAND PROCESSING
1	æ.		4.8.5	COMMAND PROCESSING		4.2.5.1	COMMUNICATION NETWORK
1	ıı.		<b>♣</b> 8. 8	w	RECOVERY PROCEDURE	4.8.8.4	DETECTION
1	ю.		4. S. S.	PROCESS	MO	<b>4</b> . 10 . 10 . 10 . 10 . 10 . 10 . 10 . 10	COMMUNICATION INTERFACE
1.0   4.8.5.5   COMMAND PROCESSING TELEMETRY COMMANDS   4.8.5.7   CULTURE CATON INTERFACE CONTAINS COMMUNICATION INTERFACE CONTAINS COMMUNICATION INTERFACE CONTAINS COMMUNICATION INTERFACE COMMUNICATION INTERFACE COMMUNICATION INTERFACE COMMUNICATION INTERFACE COMMUNICATION INTERFACE COMMUNICATION COMMANDS   4.8.5.6   COMMUNICATION INTERFACE COMMUNICATION COMMANDS   4.8.5.7   COMMUNICATION INTERFACE COMMUNICATION COMMANDS   4.8.5.7   COMMUNICATION INTERFACE COMMUNICATION COMMUNICATION COMMUNICATION COMMUNICATION INTERFACE COMMUNICATION COMM	IO.		4.8.5	PROCESS		4.2.5.0	CATION
1			£.8.5	S	•	•	
1.0   1.0		n	ņ	CATION	H	a. ♣. n	CORE
1.0   4.8.5   COMMUNICATION INTERFACE   COMMUNICATION COMMAND PRICE   COMMUNICATION COMMAND PRICE   COMMUNICATION INTERFACE   COMMUNICATION COMMINICATION COMMUNICATION	10.		4.2.5	H		4.1.8.6	MOUNT
1.   1.   1.   1.   1.   1.   1.   1.	ĸ.		<b>★</b> . 8. 51.	H	COMMUNICATION COMMANDS	4. B. B.	
1.   1.   1.   1.   1.   1.   1.   1.	<b>8</b> 0.		♣. 20.53	<b>H</b>		4.8.5.5	
1.   4.   2.   2.   2.   2.   2.   2.   2	er.		♣. 83.08.	н	TELEMETRY REQUIREMENTS	OS RD	TELEMETRY CONTROL
1.5   3   0   4.8.5.7   TELEMETRY CONTROL   LIBER AVAILABILITY   1.0.5   1.0			. m. di			1.1.3	REALTIME
1.0				_		1.1.3	REALTIME
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1					LIBE AVAILABILITY TELEHETRY COMMANDS	io i	DELAYED
8         0         1.1.1         ACQUIRE REALTINE DATA         CREW PRIVATE CONHUNICATIONS         4.3.3         HABITABILITY           8         1         1.1.1         ACQUIRE REALTINE DATA         CREW PRIVATE CONHUNICATIONS         4.3.3         HABITABILITY           8         1         4.0         OPERATE CORE SYSTEM         AUTOMATIC EMERGENCY COMMANDS         4.3.8         SPACE STATION           8         1         4.3.8         SPACE STATION SAFETY         AUTOMATIC EMERGENCY COMMANDS         4.0         OPERATE COS           8         1         4.3.8         SPACE STATION SAFETY         ABNORMAL AND EMERGENCY COMDI-         4.5.9         NOWITOR COS           8         1         4.3.4         SPACE STATION SAFETY         ABNORMAL AND EMERGENCY COMDI-         4.5.9         NOWITOR COS           8         0         4.3.3         HABITABILITY         CREW PRIVATE COMMUNICATIONS         1.1.1         CAPTURE REG           8         1         4.3.4         EVA SUPPORT         A.3.4         EVA SUPPORT           8         0         4.5.5         OPERATION         A.3.4         EVA SUPPORT           8         0         4.5.2         HONITOR COSCENIE         ABNORMAL AND EMERGENCY         4.3.4         EVA SUPPORT	ю		4.8.5			, <b>1</b> 0	
1.1.1   ACQUIRE REALITHE DATA   CREW PRIVATE COHMUNICATIONS   4.5.5   HABITABILITY			-	ser entre participa			CONTROL
2         1         4.0         OPERATE CORE SYSTEM         AUTOMATIC EMERGENCY COMMANDS         4.3.8         SPACE STATION SAFETY         AUTOMATIC EMERGENCY COMMANDS         4.3.8         SPACE STATION SAFETY         ABNORMAL AND EMERGENCY COMMANDS         4.5.1         MONITOR COR           2         1         4.3.8         SPACE STATION SAFETY         ABNORMAL AND EMERGENCY COMDITOR         4.5.1         MONITOR COR           2         1         4.3.3         HABITABILITY         CREW PRIVATE COMMUNICATIONS         1.1.1         CAPTURE REASONDS           2         1         4.3.4         EVA SUPPORT         PROCEDURES         PROCEDURES         4.3.5         OPERATION           2         0         4.3.5         OPERATION AND PROCEDURES         PROCEDURES         4.3.6         EVA SUPPORT           2         0         4.5.5         OPERATION AND PROCEDURES         PROCEDURES         4.3.6         EVA SUPPORT           2         0         4.5.1         HONITOR CUSTOMER SYSTEM         ABNORMAL AND EMERGENCY         4.3.2         5.24         EVA SUPPORT           3         0         4.5.2         HONITOR CUSTOMER SYSTEM         ABNORMAL AND EMERGENCY         4.3.2         5.24         EVA SUPPORT			• ~	ACQUIRE REALTIME DATA		# <b>*</b>	HABITABILITY Habitability
8         0         4.3.8         SPACE STATION SAFETY         AUTOMATIC EMERGENCY COMMANDS         4.0         OFERATE COMMINION CONTROL           8         I         4.3.8         SPACE STATION SAFETY         ABNORMAL AND EMERGENCY CONDI-         4.5.1         MONITOR COR           8         I         4.3.3         HABITABILITY         CREW PRIVATE COMMUNICATIONS         1.1.1         CAPTURE REASONS           8         I         4.3.4         EVA SUPPORT         PROCEDURES         PROCEDURES         4.3.5         OPERATIONS           8         O         4.3.5         OPERATION AND PROCEDURES         PROCEDURES         4.3.6         EVA SUPPORT           8         O         4.5.1         HONITOR CORE SYSTEM         ABNORMAL AND EMERGENCY         4.3.8         SPACE STATION           8         O         4.5.2         HONITOR CORE SYSTEM         ABNORMAL AND EMERGENCY         4.3.8         SPACE STATION				CORE SYST			
CONDITION SAFETY   ABNORMAL AND EMERGENCY CONDI-   4.5.1   MONITOR CONDITION BATCH   CONDITION BATCH   ACCOUNTING TO   4.5.2   CONDITION BATCH   CREW PRIVATE COMMUNICATIONS   1.1.1   CAPTURE REASON   CAPTURE			₩.	STATION S	EMERGENCY	<b>6</b> .0	CORE
A 1 4.3.2 SPACE STATION SAFETY CREW PRIVATE COMMUNICATIONS  R 0 4.3.3 HABITABILITY  R 1 4.3.4 EVA SUPPORT  R 0 4.3.5 OPERATION AND PROCEDURES  R 0 4.5.1 HONITOR CORE SYSTEM  R 0 4.5.2 HONITOR CORE SYSTEM  R 0 4.5.3 GONDITION DATA  R 0 4.5.4 EVA SUPPORT  R 0 4.5.5 OPERATION AND PROCEDURES  R 0 4.5.1 HONITOR CORE SYSTEM  R 0 4.5.2 HONITOR CORE SYSTEM  R 0 4.5.3 SPACE STATION  R 0 4.5.3 SPACE STATION  R 0 4.5.3 SPACE STATION  R 0 4.5.4 CONDITION DATA  R 0 4.5.2 HONITOR CUSTOMER SYSTEM  R 0 4.5.3 SPACE STATION  R 0 4.5.4 SPACE STATION  R 0 4.5.5 SPACE STATION  R 0 4.5.			4	STATION S	ABNORHAL AND EMERGENCY	4.8.1	R CORE
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2 O 4.3.3 HABITABILITY CREW PRIVATE COMMUNICATIONS 1.1.1 CAPTURE REA REASTS HABITABILITY CREW PRIVATE COMMUNICATIONS 1.1.1 CAPTURE REASTS HABITABILITY CREW PRIVATE COMMUNICATIONS 1.1.1 CAPTURE REASTS OF EVASUABLE STREET PROCEDURES 4.3.5 OPERATIONS SUPPORT 2.3.4 EVASUABLE STATIST CONDITION DATA CONDITION DATA CONDITION DATA CONDITION DATA 4.3.2 SPACE STATISTS CONDITION DATA 4.3.3 SPACE STATISTS CONDITION DATA 4.3.3 SPACE STATISTS CONDITION DATA CONDITION DATA 4.3.3 SPACE STATISTS CONDITION DATA 4.3.3 SPACE STATISTS CONDITION DATA CONDITION D					TIOM DATA		
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A CONDITION AND PROCEDURES PROCEDURES  SUPPORT  SUPPORT  ABMORMAL AND EMERGENCY 4.3.2 SPACE STATION  CONDITION DATA  A.S.A HOWITOR CUSTOMER SYSTEM ABNORMAL AND EMERGENCY 4.3.2 SPACE STATION  A.S.A HOWITOR CUSTOMER SYSTEM ABNORMAL AND EMERGENCY 4.3.2 SPACE STATION				EVA SUPPORT	EDURES	#. 13. 18 19. 19. 18	OFFICIAL MEALITHE DAIA OFFRATIONS AND PROCEDURES
SUPPORT  A O 4.5.1 MONITOR CORE SYSTEM ABNORMAL AND EMERGENCY 4.3.2 SPACE STATION  STATUS  A O 4.5.2 HONITOR CUSTOMER SYSTEM ABNORMAL AND EMERGENCY 4.3.2 SPACE STATION			n	OPERATION AND PROCEDURES	PROCEDURES	# n . #	SUPPORT EVA SUPPORT
STATUS CONDITION DATA 2 0 4.5.2 HONITOR CUSTOMER SYSTEM ABNORMAL AND EMERGENCY 4.3.2 SPACE STATION			ĸ.	CORE SY	ABHORMAL AND EMERGENCY	4. 03.	STATION
			ĸ.	CUSTOMER	COMDITION DATA ABNORMAL AND EMERGENCY	<b>4</b> . s. a. s.	STATION

MO SWD PROCESS NAME			HORITOKING TREATMENT SUPPORT		-	CAUTION AND WARNING	FIRE DETECTION AND	COMINOL MONITOR CORE SYSTEM STATUS	MONITOR CUSTOMER SYSTEM	MASS PROPERTIES	CONFIGURATION UPDATE AUTOMATIC CONTROL PRO-	CESSING MONITOR CORE SYSTEM	SIATUS MONITOR CORF SVRIFM		MONITOR CUSTOMER SYSTEM STATUS	FAULT ANALYSIS	SYSTEM TEST AND	EVALUATION OPERATOR CORE SYSTEMS		PROCEDURES	CAUTION AND WARNING	ABNORMAL AND EMERGENCY		CAUITON AND WARNING	ABHORMAL AND EMERGENCY	CAUTION AND WARRING	-	AHBHORMAL AND EMERGENCY PROCEDURY	ABBORNAL AND EMERGENCY	FROCEDURES FROCEDURES FROCESIONES FROCESIONES	FRUCEDURES CREW/GROUND COMMUNICATION
SND PROCESS NO	4.3.1.8	4.3.1.1	4.3.1.8	4.3.1.8	±.α.α.α	4.3.8.1	4.8.4.5	4.8.1	4.5.2	<b>4</b> .8.0	<b>4</b> . ∞. ∞. w.	4.5.1	4.8	•	4.5.2	4.8.4.1	4. B. B.	•·•	8	8 8 9	4.3.8.1	4.3.20.20		7.8.0	4.8.8.8	4.3.8.1		<b>4</b> . 8. 8. 8	4.3.8.8		4.3.3.8
DATA FLOW MESSAGE	CONDITION DATA ABNORMAL PHYSIOLOGICAL DATA	ABBORMAL PHYSIOLOGICAL BEADTHES	DIAGNOSES, SYMPTOMS	DIAGNOSES, STHFTONS	AUTOMATIC EMERGENCY COMMANDS	PRESSURE SHELL PEMETRATION,	200		ABNORMAL AND EMERGENCY	ABHORMAL AND EMERGENCY	ABNORMAL AND EMERGENCY AUTO-	ABNORMAL AND EMERGENCY	CONDITIONS ABHORMAL AND EMERGENCY	CONDITION DATA	ABHORMAL AND EMERGENCY CONDITIONS	ABNORMAL CONDITIONS	PAYLOAD SYSTEM, FAULT	AUTOMATIC EMERGENCY COMMANDS	ABBOOMAT CHA TANGORDA	CEDURES	ABHORMAL AND EMERGENCY	ABNORMAL AND EMERGENCY	CONDITIONS ABROBLAT AND BENESCE		ABNORMAL AND EMERGENCY	CONDITIONS ABNORMAL AND EMERGENCY		ABNORMAL AND EMERGENCY CONDITIONS	ABNORMAL CONDITIONS	PAYLOAD SYSTEM, FAULT	CREW PRIVATE VOICE, VIDEO
PROCESS NAME	STATUS CREW PHYSIOLOGICAL MOMI-	MEDICAL DIAGNOSTICS	MEDICAL DIAGNOSTICS	TREATHENT SYMPTOMS	OPERATE CORE SYSTEMS	FIRE DETECTION AND	CAUTION AND WARNING	CAUTION AND WARNING	CAUTION AND WARNING	CAUTION AND WARNING	ABNORMAL AND EMERGENCY	ABHORMAL AND EMERGENCY	PROCEDURES ABHORHAL AND EMERGENCY		ABNORMAL AND EMERGENCY PROCEDURES	ABBORNAL AND EMERGENCY PROCEDURES	ABBORNAL AND EMERGENCY	AUTOMATIC CONTROL PRO-	CESSING AUTOMATIC CONTROL PRO-		MONITOR CORE SYSTEM STATUS	HOWITOR CORE SYSTEM	STATUS MOMITOR CHRICHER RESIDE		MONITOR CUSTOMER SYSTEM STATUS	MASS PROPERTIES	CONFIGURATION UPDATE	MASS PROPERTIES CONFIGURATION UPDATE		SYSTEM TEST AND FVALUATION	CAPTURE REALTIME DATA
PROCESS	4.5.1.1	4.3.1.8	4.3.1.8	4.3.1.3	•.0	4.8.4.5	4.3.8.1	4.3.8.1	4.3.2.1	4.3.8.1	4.3.8.8	4.3.8.8	4.3.8.8	1	ક. છ. છ.	4.3.8.8	4.3.8.8	4.3.8.3	4 0		4.5.1	4.5.1	4	) 	<b>4</b> . 5. 20	4.5.3		₽. a. a	4.8.4.1	4.5.5	1.1.1
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SHD PROCESS NO SHD PROCESS NAME	œ	4.3.5 OPERATIONS & PROCEDURE SUPPORT	.5.1 MAINTENANCE PROCEDURES	4.3.4.6 EVA VISUAL INFORMATION	4.3.4.6 EVA VISUAL INFORMATION	4.3.5.1 MAINTENANCE AND REPAIR	PROCEDURES 4.5.5.1 MAINTENANCE AND REPAIR	PROCEDURES	4.3.5.8 OFERATIONS PROCEDURES 8.6 STOPE CHECKOLT AND SERVICE		4.3.4.6 EVA VISUAL INFORMATION	4.3.4.6 EVA VISUAL INFORMATION	4.3.5.8 UPDATE SYSTEM SOFTWARE	4.3.5.4 GENERAL PURPOSE	4.4.1.1 GROUND TRACK 4.4.1.1 GROUND TRACK	4.4.1.4 RELATIVE ALIGNMENT		4.1.1.1 SPACECRAFT STATE/ORBIT DETERMINATION	4.1.8.6 DETERMINE POINTING HOUNT	CONTROL 4.5.5 SYSTEM TEST AND	EVALUATION	EVALUATION	4.5.1 HOWITOR CORE SYSTEMS	4.5.8 MOMITOR CUSTONER SYSTEMS	STATUS	4.5.3 MASS PROPERTIES	4.5.5 SYSTEM TEST AND	EVALUATION 4.5.1 MONITOR CORE SYSTEMS	STATUS	4.5.2 MONITOR CUSTOMER SYSTEMS STATUS	4.5.3 HASS PROPERTIES	CONFIGURATION UPDATE 4.5.4 DIAGNOSTICS SUPPORT	4.5.5 SYSTEM TEST AND
DATA FLOW HESSAGE	CREW PRIVATE VOICE, VIDEO CREW PRIVATE VOICE, VIDEO CREW PRIVATE VOICE, VIDEO	INSTRUCTION FOR RELEVANT EVA PROCEDURES	ANCE	INSIRUCTION FOR RELEVANT EVA PROCEDURES	EVA MAINTENANCE AND REPAIR PROCEDURES	SSPE MAINTENANCE AND REPAIR	EVA MAINTENANCE AND REPAIR	PROCEDURES TVA OBTBACTORS BECATAMERS		PROCEDURES	EVA MAINTENANCE AND REPAIR Procedures	EVA OPERATIONS PROCEDURES	OPERATING SOFTWARE	OPERATING SOFTWARE	UPDATED MAVIGATION STATE	COORDINATE ALIGNMENT RELIEF		UPDATED MAVIGATION STATE	COORDINATE ALIGNMENT RELIEF	TEST RESPONSES		2	ABHORHAL AND EHERGENCY	ABNORMAL AND EMERGENCY	CONDITIONS	ABNORMAL AND EMERGENCY CONDITIONS	PAYLOAD SYSTEM FAULT	ABWORMAL AWD EMERGENCY		ABNORMAL AND EMERGENCY CONDITIONS	ABHORMAL AND EMERGENCY	CONDITIONS ABNORMAL CONDITIONS	PAYLOAD SYSTEM FAULT
PROCESS MAHE	COMM		INFOR		MAINTENANCE AND REPAIR PROCEDURES	SSPE CHECKOUT AND	EVA VISUAL INFORMATION	TOTAL THEORY	TENANCE AND	•	PROCEDURES	OPERATIONS PROCEDURES	GENERAL PURPOSE PROGRAMHING LANGUAGE	UPDATE SYSTEM SOFTWARE	SPACECRAFT STATE/ORBIT DETERMINATION	DETERMINE POINTING MOUNT	CONTROL	TION	RELATIVE ALIGNMENT	DETERMINATION OPERATE CORE SYSTEM	OPERATE CORE SYSTEM		CAUTION AND WARNING	CAUTION AND WARNING		COCTON OND WAKNING	CAUTION AND WARNING	ABNORMAL AND EMERGENCY		FUERGENCE	ND EHERGENCY	ND EHERGENCY	PROCEDURES ABNORMAL AND EMERGENCY
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RND PROCESS NO 2ND PROCESS NAME	EVALUATION 4.3.2.1 CAUTION AND WARNING	4.5.8.8 ABNORNAL AND EMERGENCY	PROCEDURES 4.5.4 DIAGNOSTICS SUPPORT	4.5.5 SYSTEM TEST AND	EVALUATION AND WARNING	!	4.3.2.2 ABBORMAL AND EMERGENCY PROCEDURES	4.3.2.1 CAUTION AND WARNING	4.3.8.8 ABHORMAL AND EMERGENCY	PROCEDURES	4.3.2.2 ABBORMAL AND EMERGENCY PROCEDURES	4.5.1 HOMITOR CORE SYSTEMS	4.0 OPERATE CORE SYSTEM	4.0 OPERATE CORE SYSTEM	4.3.2.1 CAUTION AND WARNING	4.3.8.8 ABHORMAL AND EMERGENCY	PROCEDURES 4.5.1 MONITOR CORE SYSTEMS	STATUS 4.5.1 FAULT AMALYSIS	4.5.4.1 FAULT AWAIYSIS	4.3.8.8 ABNORMAL AND EMERGENCY	PROCEDURES 4.5.4.1 MONITOR CORE SYSTEMS	STATUS	FAULT	A.O.A.O. IREND ABALKSIS A.S.A.S. TURNED ABATORIS	1.1 FAULT	FAULT	FAULT ANALYSIS	5.1 MANAGE FLIGHT SYSTEM FACILITIES	4.8 OPERATE NON-GN & C CORE	5.8 MANAGE GROUND SYSTEM	FACILITIES 5.8 MANAGE GROUND SYSTEM	
DATA FLOW NESSAGE	ABHORMAL AND EMERGENCY	ABBORNAL AND EMERGENCY	CONDITIONS OUT OF TOLERANCE CONDITIONS	REQUIRED SYSTEM TEST	ABHORMAL AND EMERGENCY		ABBURBAL AND EMERGENCY CONDITIONS	ABNORMAL AND EMERGENCY	ABHORMAL AND EMERGENCY	CONDITIONS	ABHORMAL COMDITIONS	OUT OF TOLERANCE CONDITIONS	TEST ROUTINES	TEST RESPONSES	PAYLOAD SYSTEM FAULT	PAYLOAD SYSTEM FAULT	REQUIRED SYSTEM TEST	ABNORMAL CONDITIONS	OUT OF TOLERANCE CONDITION	ABHORMAL COMDITIONS	OUT OF TOLERANCE CONDITION		TIPETER TO BE VELLETE		HOM-STANDARD FAULT		ABMORMAL TRENDS	RECOMPIGORE, DISCONNECT	reconfigure, disconnect	IDRSS SCHEDULED	TDRSS REQUEST	TDRSS REQUEST
PROCESS NAME	PROCEDURES HOWITOR CORE SYSTEMS	MONITOR CORE SYSTEMS	MINITOR CORE SYSTEMS	STATUS MOWITOR CORE SYSTEMS	STATUS HOWITOR CUSTOMER SYSTEMS		STATUS CUSIONER SISTERS STATUS	MASS PROPERTIES COMFIGURATION UPDATE	MASS PROPERTIES	0	DIAGNOSTICS SUPPORT	DIAGNOSTICS SUPPORT	SYSTEM TEST AND EVALUATION	SYSTEM TEST AND EVALUATION	SYSTEM TEST AND	SYSTEM TEST AND	SYSTEM TEST AND	ABHORMAL AND EMERGENCY	PROCEDURES MONITOR CORE SYSTEMS STATUS	FAULT AMALYSIS	FAULT ANALYSIS	TAILT AMAINSTS	AMALYST	AMALYSI		ANALYSI	TREND AMALYSIS	5	MANAGE FLIGHT SYSTEM FACILITIES	MANAGE FLIGHT SYSTEM	FACILITIES Manage Flight System	FACILITIES Manage Ground System
PROCESS	4.8.1	4.8.1	4.8.1	4.5.1	4.5.8	•	2 D	₽.8.4	4.5.3		<b>.</b>	4.8.4	4.5.5	♣. G.	₽·8·9	£.5.5	4.8.8	4.3.8.8	4.5.1	1.8.4.1	1.5.4.1	. 4 8		5.4.1	1.5.4.8	1.8.4.G	5. <del>4</del> . 5	2		5.1	5.1	æ. es
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Page	S NO 2ND PROCESS NAME	FACILITIES HAMAGE FLIGHT SYSTEM	FACILITIES INTERFACE MANAGEMENT	ADJUST FOR UNSCHEDULED	MODE CHANGES DUALITY VERITICATION	SCHEDULE STATUS COMPARE	STATUS	TRANSMIT RECONFIGURATION	SCREDULE INTEDFACE MANAGEMENT		Æ	INTERFACE MANAGEMENT	SCHEDULE STATUS COMPARE	ADJUST FOR UNSCHEDULED	MODE CHANGES	ADJUST FOR UNSCHEDULED MODE CHANGES	ADJUST FOR UNSCHEDULED	HODE CHANGES TRANSMIT RECONFICHBATION	SCHEDULE COORTIGORY TO A	GROUND STATUS DATABASE	DEVELOP COMMUNICATION	MODEL CONFIGURATION	DEVELOP HARDWARE INTEGRA-	DEVELOP SOFTWARE INTEGRA-	TIOM COMMIGURATION DECEMOS TO TRANSPORT	CONFIGURATION	INTERPRET HODEL REQUESTS	SIMULATE SPACE STATION	SYSTEM COMM. ELEMENTS	DEVELOP COMMUNICATION	SIMULATE SPACE STATION		SIMULATE SPACE STATION ELEMENTS	INTERPRET MODEL REQUESTS	SIMULATE SPACE STATION	ELEMENTS	SYNTEM COME STREETS	SIMULATE SPACE STATION
	SND PROCESS NO	<b>.</b> 1	5.8.1	10 61 61	4.6.4	a.	a. s.	. e.	el el		5.8.3	5.8.1	cat cat	80 61 80		o Xt O	3.3.4F	60 61		4. cs.	æ.		<b>4</b> .	8.8	«	)	6.1	<b>8</b> .00	1	01 10	ø.		<b>.</b>	6.1	<b>6</b> 0	•	9	9
exsources	DATA FLOW MESSAGE	IDRSS SCHEDULED	DATA STATUS '	MOTICE OF UNSCHEDULED MODE	DATA STATUS	SCHEDULE STATUS				SCHEDULE STATUS	COMFLICTS		CONFLICTS	RECONFIGURE	TO A SHIP A TO THE STATE OF THE		NOTICE OF UNSCHEDULED HODE	RECONFIGURE		COMFIGURATION STATUS, USAGE	ICATION R		HARDWARE MODEL REQUIREMENTS	SOFTWARE MODEL REQUIREMENTS	TRAIMING EXERCISE REQUIRE-	MENTS	COMMUNICATION MODEL REQUIRE- MENTS SOFTWARE DIACHOSTICS	RICATIONS		COMPONICATION CONFIGURATION	SIMULATED SPACE STATION		SIMULATED SPACE STATION COMMUNICATION	HARDWARE HODEL REQUIREMENTS	HARDWARE INTEGRATION CONFIGU-	RATION SIMILATED SPACE STATION	HOI	SIMULATED SPACE STATION
	PROCESS NAME	FACILITIES MANAGE GROUND SYSTEM FACILITIES	VERIFIC	ADJUST FOR UNSCHEDULED MODE CHANGES	-		MANAG	INTERFACE MANAGEMENT	SCHEDULE STATUS COMPARE	SCHEDULE STATUS COMPARE	SCHEDULE STATUS COMPARE	TRANSHIT RECONFIGURATION	TRANSHIT RECONFIGURATION	TRANSPORT RECONFIGURATION	GROUND STATUS DATABASE	HANAGEHENT	ADJUST FOR UNSCHEDULED MODE CHANGES		MODE CHANGES	ADS CHANGES	INTERPET HODEL REQUEST		IMTERPRET MODEL REQUESTS	INTERPRET MODEL REQUESTS	INTERPRET MODEL REQUESTS		DEVELOP COMMUNICATION MODEL CONFIGURATION	DEVELOP COMMUNICATION	MODEL CONFIGURATION	· [	SIMULATE SPACE STATION	SYSTEM COMM. ELEMENTS	SYSTEM COMM. ELEMENTS	DEVELOP HARDWARE INTEGRA-	DEVELOP HARDWARE INTEGRA-	TION CONFIGURATION SIMULATED SPACE STATION		SIMULATE SPACE STATION
	PROCESS	<b>20</b>	1.3.4	3.3.4F	5.8.1	5.8.1	6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6	7 21 0	8.8	5.8.8 8.8	80 GE GE	50 50 50	80 68 50	т. Ст.	8.00	• •	 	5.8.5		0 St	8.1	,	1.0	6.1	6.1		Ni PO	6 63	4	•	8	:	? •	₽.9	4.8	10°	)	8. 13
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NO SHD PROCESS NAME	SYSTEM COMM. ELEMENTS DEVELOP HARDWARE INTEGRA-	TION INTERPRET MODEL REQUESTS	SIMULATE SPACE STATION	PROCESSORS DEVELOP SOFTWARE INTEGRA-	TION CONFIGURATION Interpret Hodel Requests	DEFINE TRAINING PLAN	IMTERPRET MODEL REQUESTS	DEFINE TRATETACT	TRAINING		CONFIGURE SIMULATION	COMPUCT TRAIMING EXERCISE EVALUATE OPERATOR	PERFORMANCE	DEFINE TRAINING SCRIPT	DEFINE TRAING SCRIPT	COMPOCE INCIDENCES ENERGINE	COMPIGNER STREETS	EVALUATE OPERATOR	PERFORMANCE	DEFINE TRAINING SCRIPT	CONDUCT TRAINING EXERCISE	MAINTAIN OPERATOR	TRAIMING STATUS	EVALUATE OPERATOR	BUILD & DELIVERY	CONTINUE & COLUMN	BOILD & DELIVERY	DOCUMENTATION	DOCUMENTALION		DOCUMENTATION	DOCUMENTATION	COMMUNICATION	CONFIGURATION CONTROL AND		CONFIGURATION CONTROL AND MANAGEMENT SUPPORT
SHD PROCESS	₩.	6.1	0.4	<b>9</b> .	6.1	6.8.1	6.1	8	6.8.1	6.8.3	4.8.4	 		8.8.0		9 6	4.60	8.8.8	•	eo eo		6.8.7		<b>9</b> .8.0	4.8.9	•	P .	9 . G . S	8.8.9	(	Ø. Ø.	8.8.8	6.9.7	6.9.1	•	
DATA FLOW HESSAGE	COMMUNICATION HARDWARE INTEGRATION CONFIGU-	RATION SOFTWARE MODEL REQUIREMENTS	SOFTWARE INTEGRATION CONFIG-	COFFIGNATE INTEGRATION CONFIGNATION	URALIUM TRAINING EXERCISE REQUIRE-	ments Training exercise Regularements	TRAINING EXERCISE REQUIREMENT	TRAINING EXERCISE	TRAINING EXERCISE	HODEL REQUIREMENTS	SIMULATION REQUIREMENTS	TRAINING OBJECTIVES		MODEL REQUIREMENTS	SINOLATION KEQUIKERENTS	TIMELINE COMDITIONS	-	EXERCISE RESULTS		TRAINING ORGECTIVES	EXERCISE RESULTS	OPERATOR PERFORMANCE	EVALUATION	OPERATOR PERFORMANCE Evaluation	RELEASE DEFINITIONS, APPROVALS	STILL REFILLS		BASELINED REQUIREMENTS	REQUIREMENTS UPDATES		REQUIREMENTS, BASELINED PRO- GRAM DOCUMENT	PROGRAM DOCUMENT UPDATES	REQUIREMENTS BASELINED PRO-	GRAN DOCUMENT BUILD RESULTS	STRACH DETERMINED APPROVATOR	NELEGOL VERTRILLOR, SIERUVALD
PROCESS NAME	ELEMENTS SIMULATE SPACE STATION ETEMENTS	LILERENIS DEVELOP SOFTWARE INTEGRA- TION CONTIGURATION	DEVELOP SOFTWARE INTEGRA-	PACE S	DEVELOR TRAINING EXERCISE	CONFIGURATION INTERPRET MODEL REQUESTS	DEFINE TRAINING PLAN	DEFINE TRAINING PLAN	TRAINING	TRAINING	DEFINE TRAINING SCRIPT	TRAINING		DEFINE MODEL REQUIREMENTS	COMPTGUE STRUCTOR	RAINING	TRAINING	TRAINING	TOATHATE OPERATOR	PERFORMANCE	EVALUATE OPERATOR PERFORMANCE	EVALUATE OPERATOR		MAINTAIM OPERATOR TRAIMIMG STATUS		CONFIGURATION CONTROL AND	H	REQUIREMENT ANALYSIS &	REQUIREMENT ANALYSIS &		DESIGN & CODE GENERATION	& CODE	DESIGN & CODE GENERATION	BUILD & DELIVERY	BUILD & DELIVERY	BO142
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SHD PROCESS NO AND PROCESS NAME	6.9.6 DOCUMENTATION 6.9.6 DOCUMENTATION 6.9.8 RECONFIGURATION DATA	6.9.6 DOCUMENTATION 6.9.6 DOCUMENTATION 6.9.8 REQUIREMENT ANALYSIS &	GENERATION TOOLS 6.9.2 REQUIREMENT ANALYSIS 8 GENERATION TOOLS 6.9.3 DESIGN & CODE GENERATION	6.9.5 DESIGN & CODE GENERATION 6.9.4 BUILD & DELIVERY 6.9.5 TESTING & ANALYSIS 6.9.5 TESTING & ANALYSIS 6.9.4 BUILD & DELIVERY	7.1.5 AMALYZE AFFECTED PLANS 7.1.8 DETERMINE EFFECTS ON INTEGRATED PLAN
DATA FLOW MESSAGE	STRUCTURE STRUCTURE RECOMFIGURATION DATA	IESI RESULIS IESI REQUIREMENIS UPDATES	BASELINED REQUIREMENTS  REQUIREMENTS, BASELINED PRO-	GRAH DOCUMENT FROGRAM DOCUMENT UPDATES STRUCTURE TEST TEST RECONFIGURATION DATA	EFFECTS ON PLANS EFFECTS ON PLANS
PROCESS MANE	BUILD & DELIVERY BUILD & DELIVERY BUILD & DELIVERY	TESTING & ANALYSIS TESTING & ANALYSIS DOCUMENTATION	DOCUMENTATION DOCUMENTATION	DOCUMENTATION DOCUMENTATION DOCUMENTATION DOCUMENTATION DOCUMENTATION RECONFIGURATION DATA	DETERMINE EFFECTS ON INTEGRATED PLAN AMALYZE AFFECTED PLANS
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#### E.4P Process to Process Data Flows (Platform)

The process-to-process data flows, shown in this section, are the primary measure of interconnection for realtime data flow and the consequences of collecting or separating functions. The data entries are similar to those of Section E.3.

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NO RND PROCESS NAHE	DATA DISTRIBUTION	DATA DISTRIBUTION	MAWAGE REALTIME DATA	MANAGE DELAYABLE DATA	MANAGE DELIVERABLE DATA	GE DELIVERABLE	DATA DISTRIBUTION	MANAGE DELIVERABLE CORE	DATA DISTRIBUTION	MANAGE DELIVERABLE	CUSTONER DATA	ACOURT BEATTIME DATA	FORMAT REALTIME DATA	DISPATCH REALTIME DATA	TELEMETRY CONTROL		BORLLOK KEALTINE DATA FORMAT REALTIME DATA	PREPROCESSING	PRIORITIZE REALTIME DATA	REALTIME	DISPATCH REALTIME DATA	MONITOR REALTINE DATA		DISPATCH DELAYED DATA	TELEMETRY CONTROL	TELEMETRY CONTROL	PRIORITIZE DELAYED DATA	MONITOR DELAYED DATA	DISPARCH DETANCE DATA	MONTHOR DELAYED DATA	MONITOR DELAYED DATA	CORE DATA INTERFACE	MANAGENENT	CORE DATA INTERFACE		CORE DAIA INTERFACE MANAGENENT	CORE DATA INTERFACE	HANAGEMENT ROUTING AND TRANSMISSION	ROUTING AND TRANSHISSION
RND PROCESS NO	1.3	1.3	1.1	1.8	1.4	1.6	a	1.8	1.8	1.4	•	*	1.1.8	1.1.4	4.8.5.7	4.8.5.7	2 17 17 17 17 17 17 17 17 17 17 17 17 17	1.3.1	1.1.8	1.1.4	1. r	n -	- C	1.8.4	4.8.5.7	4.8.8.7	œ (				1.8.3	1.8.1		1.8.1		1.0.1	1.5.1	1.3.3	1.8.8
DATA FLOW HESSAGE	REALTIME DATA	DELAYED DATA	REALTIME DATA	DELAYED DATA	CUSTOMER DATA	OPERATOR DATA	CUSTONER DATA	ADDITIONAL ANCILLARY DATA	OPERATOR DATA	ADDITIONAL ANCILLARY DATA			DATA	DISPATCH SCHEDULE	LINK REQUIREMENTS	DISPATOR SOUTHITE	FORMATTED DATA AVAILABLE	REALTINE DATA		FORMATTED DATA AVAILABLE	REALTIME DATA	LINK RECHIRENERS	TRANSHISSION PRIORITIES	DISPATCH SCHEDULE		LINK REQUIREMENTS	TRANSMISSION PRIORITIES	BULK DATA	BULK DATA		LINK AVAILABILITY	OPERATOR VOICE, VIDEO		OPERATOR VOICE, VIDEO COMMUNICATION	COST DATA		RETRANSHISSION REQUEST	RETRANSMISSION REQUEST	OPERATOR VOICE, VIDEO
PROCESS NAME	MANAGE REALTIME DATA	HANAGE DELAYABLE DATA	DATA DISTRIBUTION	DATA DISTRIBUTION	DATA DISTRIBUTION	DATA DISTRIBUTION	MAHAGE DELIVERABLE CUSTOMER DATA	MANAGE DELIVERABLE CUSTOMER DATA	MANAGE DELIVERABLE CORE	HANGE DELIVERABLE CORE	DATA ACOUTUR BEATHTME DATA	IZE RE/	RE/	REALTIME	MONITOR REALTINE DATA		DISPATCH REALTIME DATA	O	FORMAT REALTINE DATA	FORMAT REALTIME DATA	TELEMETRY CONTROL		-		MONITOR DELAYED DATA	MOWITOR DELAYED DATA	DISTAICH DELAIED DAIA DISTAICH DELAVED DATA	DELAYED	TURE	TELEMETRY CONTROL	TELEMETRY CONTROL	ROUTING AND TRANSMISSION		ROUTING AND TRANSMISSION	ROUTING AND TRANSMIRSION		ROUTING AND TRANSMISSION	CORE DATA INTERFACE	GORE DATA INTERFACE
PROCESS	1.1	1.8	1.3	1.u	1.3	r. 3	1.4	1.4	1.3	1.5		1.1.8	ä	≟.	1.1. 2.1.3	: _:	7	1.1.4	•	1.1.2	3	£.8.5.7	Ož.	1.2.3	ا ا ا	2	ė a	œ	8.2.1	4.8.5.7	ĸ	. a. a	1	s . s .	87	!	n.	.5.1	.5.1
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LEVEL	-	-	-	-	-	~	-	-	-	-	q	CQ2	œ	og c	ne ce	2 02	<b>0</b> 2	œ	O\$ C	<b>38</b> 0	8 C8	: 02	æ	œ	os o	DQ C	8 06	e og	œ	œ	O\$	œ	,	×	Q		œ	œ	œ
FUN NO L	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.1	1.1	1.1		4 4		•	•	r! •			1.1	1.8		•	n -		8.	1.8	1.8	1.8	ri :		c .	2.5	ı	1 . S	1.5	1.5

NO GND PROCESS NAME	ROUTING AND TRANSHISSION	ROUTING AND TRANSHISSION	CORE DATA CAPTURE	DISPLAYS AND CONTROLS	STOCKED AND SEATORER	PIRTHIR PHD CONINCID	CORE DATA INTERFACE Management	CORE DATA PROCESSING	CORE DATA CAPTURE	DISPLAYS AND CONTROLS	CORE DATA INTERFACE	CORE DATA INTERFACE	HAMAGEMENT	DATA EXTRACTION	RESTRICTION/CONSTRAINT	VALIDATE PAYLOAD COMMANDS	/DATA	SUFFORT CUSTOMER SYSTEM	OFERAL LON		CHECK SCHEDULE CONFLICTS	OPERATE CORE SYSTEM		SUPPORT CUSTOMER SYSTEM OPERATION	CHECK PLATFORM COMMAND	RESTRICTION/CONSTRAINT	PROVIDE ANCILLARY DATA	CHECK PLATFORM COMMAND	RESTRICTION/CONSTRAINT	VALIDATE CORE COMMANDS/	DATA	VALIDALE CORE COMMANDS/ DATA	AUTHORIZE OPERATION		CHECK RESTRICTED/	CONSTRAINED COMMANDS OPFRATE CORF SYSTEM		COMMAND INTERFACE	AUTHORIZE OPERATION
SND PROCESS	1.3.3	n. n.	1.5.8	1.5.4	*		1.8.1	1.5.3	1.5.8	1.8.4	1.5.1	1.5.1	1	 	8	20.1	•	og O	0 E	•	a. to .	0.4	;	no. Cei	œ.		<b>9</b> .	Q1		es es			8. G.	8.3.1	3.3.8	0.4		5.1.3.8	os . to .
DATA FLOW HESSAGE	COMMUNICATION CORE DATA	OPERATOR VOICE, VIDEO COMMUNICATION	CORE DATA	OPERATOR VOICE, VIDEO	COMMUNICATION OPERATOR VOICE: VIDEO	TION	CORE DATA			CORE	OFERATOR VOICE, VIDEO COMMUNICATION	OPERATOR VOICE, VIDEO		VALID PAYTOAD COMMANDS		VALID PAYLOAD COMMANDS			PAYLOAD COMMANDS TO PLATFORM	SERVICES	VALID OPERATOR COMMANDS	NOM-RESTRICTED CORE COMMANDS,	VALID CORE DATA	ANCILLAKI DATA	VALID CUSTONER/OPERATOR	CONTROL COMMANDS, DATA	ARCILLARY DATA	RESTRICTED/CONSTRAINED	PAYLOAD COMMANDS	VALID OPERATOR COMMANDS			OPERATOR AUTHORIZATION	OPERATOR AUTHORIZATION	VALID OPERATOR COMMANDS	NOW-RESTRICTED CORE COMMANDS.	VALID CORE DATA	FACILITIES COMMANDS	VALID OPERATOR COMMANDS
PROCESS MAKE	MANAGEMENT Core data interface Management	CORE DATA INTERFACE MANAGEMENT	CORE DATA INTERFACE MANAGEMENT	CORE DATA INTERFACE	MANAGEMENT CORE DATA INTERFACE		COKE DAIA CAFIURE			DATA EXTRACTION	DISTLATE AND CONTROLS	DISPLAYS AND CONTROLS		VALIDATE PAYLOAD COMMANDS	•	CHECK PLATFORM COMMAND	CHECK PLATFORM COMMAND	TOTAL TOTAL		70	VALIDATE CORE COMMANDS/ DATA	VALIDATE CORE COMMANDS/	DATA PROUTUE AMOTITANES DATA		SUPPORT CUSTONER SYSTEM		SUPPORT CUSTOMER SYSTEM	CHECK SCHEDULE CONFLICTS		CHECK SCHEDULE CONFLICTS	OPERATE CORF SYSTEMS		OPERAT	OPERAI	AUTHORIZE OPERATION	AUTHORIZE OPERATION		AUTHORIZE OPERATION	CHECK RESTRICTED/
PROCESS	1.5.1	1.8.1	1.8.1	1.8.1	1.8.1	•		D.	ni 1		•	1.5.4		# C 00	) •	CE CE	a	:	G1		ot to	es Es	•	į	оя во	1	os ro	3.3.8	1	ນ ຜ.	4	)	20.3.1	ຍ	os es os	8.3		(d) (D)	ສ. ຜ
HODE	H	0	0	H	0	•	-	0	<b>H</b> (	0 (	>	<b>H</b>	٠	• 0		H	C	•	0		•	0	c	>	н	1	н	н		н	<b>H</b>		0	н	0	0		0	<b>H</b>
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FUN N	ъ. В	1.5	2.5	1.5	1.5		o .		٠		0.	1.5				o. œ	0.8	•	0.8		o:	0.8	c a	ì	œ 0		o.	0.8	,	ο. Ο	0		8 13	86 i	os En	85. 55.		01 10	а ы

AND PROCESS NO 2ND PROCESS WAME	8.5.8 AUTHORIZE OPERATION	8.3.8 AUTHORIZE OPERATION	8.5.8 CUSTONER PAYLOAD	OPERATIONS	S.D.I CUSTORER DATA PROCESSING	a .		B.E. CHICK FAXLOAD COMMAND BESTELLING / COMMIND AND AND AND AND AND AND AND AND AND A	8.5.1 CUSTONER DATA PROCESSING	3.4.1 SEQUENCE PAYLOAD	OPERATION	8.5.8 CUSTOMER PAYLOAD	3.3 DEVELOP OPERATING EVENTS	SCHEDULE 3.3 DEVELOP OPERATING EVENTS	SCHEDULE	S.S DEVELOF UPERATING EVENTS SCHEDULES	S.3 DEVELOP OPERATING EVENTS	SCHEDULE 8.8 CHECK PLATFORM P/I CMD	RESTRICTION/CONSTR	8.3.8 VALIDATE OPERATION	3.8 DEVELOP SHORT TERM			4.0 OPERATE CORE SYSTEMS	3.4 SEQUENCE OPERATIONS	3.8.8 INCORPERATED NEW/REVISED	OPERATIONS	S.E.S CHECK FOR CONFLICTS	5.2.1 CONFIRM PAYLOAD AND CORE	3.2.1 CONFIRM PAYLOAD AND CORE	5.8.4 CHECK FOR FACILITIES	S O R BESOTURES OF THE STATES		3.2.5 RESOLVE CONFLICTS	3.2.3 CHECK FOR CONFLICTS
DATA FLOW HESSAGE	HOM-RESTRICTED CORE COMMANDS,	FACILITIES COMMANDS	VALID CUSTONER/OPERATOR	CORING COMMANDS, DATA	STATES	OPERAT	VATIN CHEMOTANO CLIAN	CONTROL COMMANDS. DATA	PROCESSED OPERATING DATA	VALID, EXECUTABLE OPERATING	80	VALID, EXECUTABLE OPERATING COMMANDS	PAYLOAD COMMANDS TO PLATFORM	SERVICES VALID OPERATIONS COMMANDS	SCHOOL COLUMN		COMMANDS REQUIRING	PATION COMMANDS TO PLATFORM	SERVICES	VALID OPERATIONS COMMANDS	COMMANDS REQUIRING	RESOLVED COMMANDS		VALID, EXECUTABLE CORE	VALID, EXECUTABLE CORE	NEW/REVISED OPERATIONS	BASETTER SCHEDIITE		HEW/REVISED OPERATIONS	BASELINE SCHEDULE	SCHEDULE WITH CONFLICTS	RESOLVED SCHEDULE	WITH CONFLICTS	SCHEDULE WITH RESOURCES AND COMFLICIS	RESOLVED SCHEDULE
PROCESS NAME	CONSTRAINED COMMANDS OPERATE CORE SYSTEM	COMMAND INTERFACE	FORM	MEDIALCE FOR CORDINATES	CUSTOMER DATA PROCESSING	PH	CUSTONER PAYLOAD	OPERATIONS	CUSTOMER PAYLOAD	CUSTONER PAYLOAD		SEQUENCE FAYLOAD OPERATIONS	FORM	RESTRICTION/CONSTRAINT VALIDATE OPERATION	DEVELOP SHORT TERM	SCHEDULES	DEVELOP SHORT TERM SCHFDUTES	DEVELOP OPERATING EVENTS		DEVELOP OPERATING EVENTS SCHEDULE	DEVELOP OPERATING EVENT	DEVELOR OPERATING EVENTS	ы	SEQUENCE OPERATIONS	OPERATE CORE SYSTEMS	CONFIRM PAYLOAD AND CORE	CONFIRM PAYLOAD AND CORF		INCORPERATE NEW/REVISED OPERATION	CHECK FOR CONFLICTS	CHECK FOR CONFLICTS	CHECK FOR CONFLICTS	FOR FACILI	CALCA FOR FACILITIES CAPABILITIES	RESOLVE CONFLICTS
PROCESS	€.0	5.1.3.8	ca ca	4	8.5.1	8.5.1	80		85. 55. 56.	a. 5.	,	1.4.0	os os	8.3.8	es es		es os	ສ. ສ	:	n n	g.g	8.8		<b>₩</b>	₽.0	3.8.1	3.8.1		ಬ ಚ ಚ	3.8.3	3.8.3	u. m. u	3.8.4	N.	3.2.5
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SS NO AND PROCESS NAME	CHECK FOR FACILITIES		SCHEDULES CHECK SCHEDIIT CONTITUES	SCHEDULE	RESOLVE CONFLICTS	RESOLVE COMMANDS	RESOLVE	CHECK SCHEDULE CONFLICTS		SCHEDULE	CALCA SCALDULE CONFLICTS	CHECK SCHEDULE CONFLICTS	CHECK SCHEDULE	MAINTAIN OPERATING EVENTS	CHECK PIATFORM D/1 CKD	RESTRICTION/CONSTRAINT	VALIDATE OPERATION	RESOLVE CONFLICTS				TIME TAG OPERATIONS	ADJUST FOR UNSCHEDULED	HODE CHANGES	SCHEDULE	COMMAND SCHEDULED HODE	CHANGE ADDINGOURNITED	ADSUST FOR UNSCHEDULED MODE CHANGES	ADJUST FOR UNSCHEDULED	MODE CHANGES ADJINT FOR INSCREDIITED	MORE CHANGES	SEQUENCE PAYLOAD	COMMAND SCHEDULED CORE	MODE CHANGES	CUSIONER FAILUAD	CHECK FOR EXECUTABILITY	COMMAND SCHEDULED MODE
SND PROCESS NO	3.8.4	3.8.8	87 87	. s.	13 04 05	8.00		3.3.8	1	13 E		8.8.8	ຜ. ຜ.	8.8.8	a	1	GE ED:	3.8.5	87 01	. 10		3.3.1	3.3.4	*		3.4.3	0		3.3.4	80 80 80 80 80 80 80 80 80 80 80 80 80 8	 	3.4.1	3.4.3	•		3.4.4	a. ♣. ¤
DATA FLOW HESSAGE	SCHEDULE WITH RESOURCES AND	VALIDATED, RESOLVED SCHEDULE	RESOLVED COMMANDS		VALIDATED, RESOLVED SCHEDULE	RESOLVED COMMANDS	COMMANDS REQUIRING REGOTIATION	PAYLOAD COMMANDS TO PLATFORM		COMMANDS BEOMFERS	MEGOTIATION	RESOLVED COMMANDS	SCHEDULABLE OPERATIONS/ IMPLEMENTATION COMMAND	TIME TAGGED OPERATIONS	PAYLOAD COMMANDS TO PLATFORM		VALID OPERATION COMMANDS	COMMANDS REQUIRING	RESOLVED COMMANDS	SCHEDULABLE OPERATIONS/	INPLEMENTATION COMMANDS	TINE TAGGED OPERATIONS	REQUIRED CHANGES	BECHTRED CHAMMES		SCHEDULED CORE MODE CHANGES	MOTICE OF DESCREDITED MODE		SCHEDULED CORE HODE CHANGE	MOTICE OF UNSCHEDULED MODE		VALID, EXECUTABLE PLATFORM PAYLOAD COMMANDS	SCHEDULED CORE HODE CHANGES	MACHINE THE THE MACHINE	D COMMANDS	PAYLOAD OPERATIONS TO BE	EXECUTED CORE HODE COMMANDS
PROCESS NAME	RESOLVE CONFLICTS	RESOLVE CONFLICTS	RESOLVE CONFLICTS	RESOLVE CONFLICTS	MAINTAIN SHORT TERM SCHEDULES	CHECK SCHEDULE CONFLICTS	CHECK SCHEDULE CONFLICTS	CHECK PLATFORM P/L CHD		WHITH OFFICE STREET		RESOLVE CONFLICTS	TIME TAG OPERATIONS	TIME TAG OPERATIONS	CHECK RESTRICTION/CONSTR-	AIMIS COMMANDS	CHECK RESTRICTION/CONSTR-AINT COMMANDS	**	CHECK SCHEDULE CONFLICTS	RESTRICTI	AINTS COMMAND	MAINTAIN OPERATING EVENTS SCHEDULE	MAINTAIN OPERATING EVENTS	ADJUST FOR UNSCREDULED	HODE CHANGES	ADJUST FOR UNSCHEDULED	ADJUST FOR UNSCHEDULED	MODE CHANGES	COMMAND SCHEDULED MODE	ADJUST FOR UNSCHEDULED	MODE CHANGES	CUSTOMER PAYLOAD OPERATIONS	ADJUST FOR UNSCHEDULED	MODE CHANGES SECHENCE PAVIOAD	OPERATIONS	SEQUENCE PAYLOAD	OFERALIONS SEQUENCE CORE SYSTEM
PROCESS	3.8.5	3.8.5	3.80.50	3. 28. 58	3.2.6	ı.	3. u.s	05 05	t			8.8.8	3.3.1	3.3.1	3.3.8		ည ရ ရ	3.3.8	ы. В. В.	n	1	ນ ນ	3.3.3	4.8.8		a.a.♠	4.8.4	)	3.4.3	85. 85.05	1	os os	3.3.4	.4.5		3.4.1	3. <b>4</b> .8
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S HO RND PROCESS NAME	CHANGE CHECK FOR EXECUTABILITY	OPERATE CORE SYSTEMS	ADJUST FOR UNSCHEDULED		SEQUENCE PAYLOAD	SEQUENCE CORE SYSTEM	SEQUELICAL SEQUENCE CORE SYSTEM OPPRATIONS	PROVIDE CUSTOMER AVIONICS SERVICES	RECOMFIGURE/D	PAYLOAD/CORE SYSTEM OPERATE GW & C SYSTEM	OPERATE NON-GN & C CORE	TRAFFIC CONTROL	GUIDANCE	ATTITUDE CONTROL	SEQUENCE CORE SYSTEM	OFFICE CONTROL	O	TRAFFIC CONTROL	OPERATIONS	GUIDANCE	SUPPORT CUSTOMER SYSTEM OPERATION	GUIDANCE	GUIDANCE	TRACKING		TRAFFIC CONTROL		DETERMINE POINTING HOUNT	SPACECRAFI STATE/ORBIT	DETERMINATION REBOOST/REENTRY TARGETING	MAVIGATION STATE
AND PROCESS	a. ♣.	•.•	8.8.£	₩. 4.	3.4.1	æ. ♣.	a. ♣. æ	<b>4</b> .4	5.1.8.6	<b>4</b> .1	<b>4</b> .	4.1.4	4.1.8	4.1.3	3.4.B	4.1.3	4.1.4	#. H. #		4.1.8	es es	4.1.8	4.1.8	4.1.8	4.1.5	• • •	4.1.1.4	4.1.8.6	4.1.1.1	4.1.8.1	4.1.1.5
DATA FLOW MESSAGE	CORE OPERATIONS TO BE EXECUTED.	VALID. EXECUTABLE CORE	SCHEDULED CORE MODE CHANGES	CORE MODE COMMANDS	PAYLOAD OPERATIONS TO BE	CORE OPERATIONS TO BE EXECUTED	VALID, EXECUTABLE CORE	CORE AVIONICS DATA	RECOMFIGURE, DISCONNECT	CORE AVIONICS DATA	RECONFIGURE, DISCONNECT	OMV, OTV STATE	REBOOST	VALID EXECUTABLE ATTITUDE COMMANDS	REBOOST	PATH VELOCITY COMMANDS		COLLISION AVOIDANCE VALID EXECUTABLE ATTIMBE	COMMANDS		OMV, OTV STATE			RELATIVE POSITION, VELOCITY	RANGE	MARGE BOSTELON CELOCIEN		POINTING COORDINATES, RATES		VELOCITY INCREMENT SCHEDULES	VELOCITY INCREMENT SCHEDULE
PROCESS NAME	OPERATIONS SEQUENCE CORE SYSTEM OPERATIONS	SEQUENCE CORE SYSTEM OPERATIONS	COMMAND SCHEDULED MODE	COMMAND SCHEDULED MODE	CHECK FOR EXECUTABILITY	CHECK FOR EXECUTABILITY	OPERATE CORE SYSTEMS	OPERATE GH & C SYSTEM	OPERATE MON-GN & C CORE	PROVIDE CUSTOMER AVIONICS SERVICES	RECOMFIGURE/DISCOMMECT PAYLOAD/CORE SYSTEM		SEQUENCE CORE SYSTEM OPERATIONS	SEQUENCE CORE SYSTEM OPERATIONS	GUIDANCE	GUIDANCE	GUIDANCE	GUIDANCE ATTITUDE CONTROL		ATTITUDE CONTROL	TRAFFIC CONTROL				TRAFFIC CONTROL		SPACECRAFT STATE/ORBIT	DETERMINES EPHEMERIDES	ATTITUDE DETERMINATION	MAVIGATION STATE	PROPAGATION REBOOST/REENTRY TARGETING
PROCESS	ນ ຜ. <b>≜</b> .	3. <del>1</del> . 8	3.4.3	a. <b>4</b> . a	3.4.4	3.4.4	•.0	4.1	<b>♣</b> Ø	• •	5.1.2.6	œ œ	3. <b>★</b> .8	a. ♣. æ	4.1.8	4.1.8	~ .	4 4 3 5	;	Ξ.	4.1.4	4.1.4	4.1.4	4.1.4	<b>*</b>			4.1.1.3	4.1.1.4	4.1.1.8	4.1.2.1
I O HODE	н	0	0	н	0	0	<b>H</b>	0	H	H	0	<b>H</b>	0	0	<b>H</b>	0	0 1	- H		н	0	H	0	H	۰ -	• 0	0	0		н	0
EVEL	CQ.	œ	æ	œ	œ	œ	œ	-	-	-	<b>H</b>	CQ1	Œ	œ	œ	œ	Q) (	at of	1	œ	Œ	œ	œ	Œ	<b>02</b> 0	8 0	n	n	n	n	80
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NO SIED PROCESS NAME	PROPOGATION Deterhine Ephenerides	REBOOST/REENTRY TARGETING	DETERMINE PINTING MOUNT	REBOOST/REENTRY TARGETING	SEQUENCE CORE SYSTEM	HAVIGATION STATE PROPAGA-	HANEUVER COORDINATION	REBOOST/REENTRY TARGETING	MANTEUVER COORDINATION	ы	MONTENTIA MAMAGEMENT	DETERMINE EPHEMERIDES		POWER SOURCE HANAGEMENT	POWER SOURCE HANAGEHENT	COMMUNICATION INTERFACE	CONTROL RELATIVE ALIGNMENT	DETERMINATION	REBOOST HANEUVER		DETERMINE POINTING MOUNT CONTROLS	DETERMINE POINTING MOUNT	DETERMINE POINTING HOUNT	COMINCE POINTING HOUNT	DETERMINE POINTING MOUNT	!	ATTITUDE AND TRANSLATION CONTROL	ATTITUDE AND TRANSLATION	CONTROL MOMENTUM MANAGEMENT		SEQUENCE CORE SYSTEMS	OPERATIONS REBOOST MANEUVER
AND PROCESS NO	4.1.1.3	4.1.8.1	4.1.2.6	4.1.8.1	4.	4.1.1.5	œ	4.1.8.1	4 6 6	4.1.3.1	10 m	4.1.1.3	4.1.3.4	4.8.1.3	4.8.1.3	4.8.5.6	4.4.1.4		4.1.8.4	4.1.8.4	Ø	4.1.8.6	4.1.8.6	4.1.8.6	4.1.8.6	•	4.1.3.1	4.1.3.1	4.1.3.3	4.1.3.4	ະນ ຜ.	4.1.8.4
DATA FLOW MESSAGE	POINTING COORDINATES, RATES	VALID, EXECUTABLE MANEUVER	POINTING COORDINATES, RATES	VELOCITY INCREMENT SCHEDULE	VALID, EXECUTABLE MANEUVER COMMAND	VELOCITY INCREMENT SCHEDULE		VALID MAMEUVER	MANEUVER COMMAND	DELTA VELOCITY COMMANDS	DELTA VELOCITY COMMANDS	POINTING COORDINATES RATES	GIMBAL POSITION, RATE	GIMBAL CHANGE REQUESTS	GIMBAL POSITION	POINTING COORDINATES	COORDINATE ALIGNMENT	REFERENCE	DELTA VELOCITY COMMANDS		GIRBAL FOSTITOR, KAIE	GIMBAL POSITION	GIMBAL CHANGE REQUESTS	POINTING COORDINATES	COORDINATE ALIGNMENT		VALID, EXECUTABLE ATTITUDE COMMANDS	DELTA VELOCITY COMMAND	DELTA VELOCITY COMMAND	GIMBAL POSITION, RATE	VALID, EXECUTABLE ATTITUDE	COMMANDS DELTA VELOCITY COMMAND
PROCESS WANE	DETERMINE POINTING HOUNT	SEQUENCE CORE SYSTEM OPERATIONS	DETERMINE EPHEMERIDES	MAVIGATION STATE PROPOGATION	REBOOST/REENTRY TARGETING	REBOOST/REENTRY TARGETING	REENTRY	MANEUVER COORDINATION		REBOOST/HANEUVER	REBOOST MANEUVER	POINTING MOUNT CONTROL	DETERMINE POINTING MOUNT CONTROL	DETERMINE POINTING MOUNT	DETERMINE POINTING MOUNT	DETERMINE POINTING MOUNT	DETERMINE POINTING HOUNT		ATTITUDE AND TRANSITION CONTROL	MOMENTUM MANAGEMENT		POWER SOURCE MANAGEMENT	POWER SOURCE HANAGHENT	COMMUNICATION INTERFACE	RELATIVE ALIGNMENT	DETERMINATION	4	REBOOST MANEUVER	REBOOST MANEUVER	DETERMINE POINTING MOUNT	ATTITUDE AND TRANSLATION	CONTROL ATTITUDE AND TRANSLATION
PROCESS	4.1.8.6	3.4.2	4.1.1.3	4.1.1.5	4.1.2.1	4.1.8.1	os (		CS.	1.1.2.4	1.1.8.4	œ	1.1.2.6	1.1.2.6	1.1.2.6	1.1.2.6	1.1.2.6		4.1.3.1	10 1	;	. 2.1.3	. 8.1.3	8.5.6	4.1.4	0	•	.1.8.4	1.8.4	1.2.6	1.3.1	4.1.3.1
I O	H	0	•	H	н	0	0	- c	H	0	0	H	0	•	H	0	н		<b>+</b>	н н	•	•	<b>+</b>	<b>+</b>	•	c	>	•	•	•	<b>*</b>	<b>*</b>
LEVEL	n	n	ຄ	n	ຄ	n	<b>n</b>	0 10	8	n	ຄ	ຄ	n	ຄ	n	ຄ	n	1	ຄ	10 E	•	ຄ	ຄ	n	n	r	3	n	ຄ	n	n	ຄ
FUN NO L	4.1.1	4.1.8	4.1.2	4.1.8	4.1.8	4.1.8		3 . 1 . 5	-	4.1.8	4.1.2	4.1.8	<b>4</b> .1.20	4.1.2	4.1.2	4.1.8	4.1.8		<b>4</b> .1.8	6.1.2	•	<b>4</b> .1.2	4.1.2	4.1.8	4.1.2		•	4.1.3	4.1.3	4.1.3	4.1.3	4.1.3

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ZND PROCESS NO AND PROCESS NAME	4.1.3.8 EFFECTOR CONTROL	4.1.3.3 MOMENTUM MANAGEMENT	4.1.3.1 ATTITUDE AND TRANSLATION	4.1.8.4 REBOOST MANEUVER 4.1.8.1 ATTITUDE AND TRANSTATION		CONTROL 4.1.6.5 COMMAND INTERFACE	4.1.6.5 COMMAD INTERFACE	4.1.6.5 COMMAND INTERFACE	4.1.6.5 COMMAND INTERFACE	4.1.6.5 COHMAND INTERFACE	PROCESSING 4.1.6.5 COMMAND INTERFACE	2.5.2 AUTHORIZE OPERATION	3.4.8 SEQUENCE OPERATIONS	4.1.6.1 TIME-SOURCE MANAGEMENT	4.1.6.2 TIME UPDATE	4.1.6.3 FREQUENCY SOURCE HANAGE-	4.1.6.4 DEVICE MANAGEMENT	IRE/DI	#AZLOAD, CORE SYSTEM #.2.1 OPERATE POWER SYSTEM	4.8.1.8 CONFIGURE POWER	4.2.1.3 POWER SOURCE MANAGEMENT	4.8.1.3 POWER SOURCE MANAGEMENT	4.8.1.5 PROJECT ENERGY AVAILABLE	4.8.1.5 PROJECT ENERGY AVAILABLE	3.4.2 SEQUENCE CORE SYSTEM	4.2.1.3 POWER SOURCE HANAGEMENT
DATA FLOW HESSAGE	ATTITUDE TRANSLATION COMMANDS	REBOOST ATTITUDE, TORQUE	ATTITUDE TRANSLATION COMMANDS	DELIA VELOCITY COMMAND REBOOST ATTITUDE, TORQUE	POSITION, R	COMMAND, DATA	CORE COMMANDS	SOURCE SELECTION COMMAND	UPDATE REQUEST	SOURCE SELECTION COMMAND	SEQUENCE, STATUS REQUEST	COMMAND, DATA	CORE COMMANDS	SOURCE SELECTION COMMAND	UPDATE REQUEST	SOURCE SELECTION COMMAND	SEQUENCE, STATUS REQUEST	RECOMFIGURE, DISCOMMECT	RECOMFIGURE, DISCONNECT	LOAD CONNECTION	GIMBAL POSITION	GIMBAL CHANGE REQUESTS	POWER	REFERENCE OUPUT	LOAD COMMECTION	ELECTRICAL LOAD FORECAST, ABNORHAL POWER CONDITION
PROCESS WAME	CONTROL ATTITUDE AND TRANSLATION CONTROL	ATTITUDE AND TRANSLATION	EFFECTOR CONTROL	MOMENTUM MANAGEMENT MOMENTUM MANAGEMENT		VALIDATE CORE COMMANDS	SEQUENCE OPERATIONS	TIME-SOURCE MANAGEMENT	TIKE UPDATE	FREQUENCY SOURCE MANGE-	DEVICE MANAGEMENT	COMMAND INTERFACE	COMMAND INTERFACE	COMMAND INTERFACE	COMMAND INTERFACE	COMMAND INTERFACE	COMMAND INTERFACE	OPERATE POWER SYSTEM	RECONFIGURE/DISCONNECT	CORE	DETERMINE POINTING MOUNT	CONTROLS DETERBINE POINTING MOUNT CONTROLS	EVELLATE ARRAY	EVALUATE ARRAY BEREGBANGE	CONFIGURE POWER DISTRIBU-	CONFIGURE POWER DISTRIBUTION
PROCESS	4.1.3.1	4.1.3.1	1.1.3.8	1.1.3.3	.1.3.4	8.3.8	a. ♣. æ	1.8.1	4.1.6.2	4.1.6.3	4.1.8.4	.1.6.5	4.1.6.5	4.1.6.5	1.8.5	4.1.6.5	.1.6.5	4.2.1	5.1.8.6	3.4.2	4.1.2.6	1.8.6	4.2.1.1	.2.1.1	6.2.1.2	4.2.1.2
HODE	•	H	<b>+</b>	<b>+ 0</b>	H.	•	0	<b>4</b>	<b>+</b>	Ŧ H	· H	<b>*</b>	# H	•	•	•	•	H	<b>8</b>	0	•	<b>≠</b>	•	<b>≠</b>	₩ H	•
	ຄ	ы	n	nn	<b>89</b> .	n	ĸ	n	ю	ю	n	n	n	ຄ	n	n	ค	CQ2	æ	n	n	n	n	<b>8</b>	n	ຄ
FUR NO LEVEL	4.1.3	4.1.3	4.1.3	4.1.3	4.1.3	4.1.6	4.1.6	4.1.6	4.1.6	4.1.8	4.1.8	4.1.8	4.1.6	4.1.6	4.1.8	4.1.8	4.1.8	<b>♣</b>	æ,	4.8.1	4.8.1	4.2.1	4.8.1	4.8.1	4.8.1	4.8.1

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S NO AND PROCESS NAME	3 POWER SOURCE MANAGEMENT			1	COMFIGURE POWER		LEALKIBOILOM LEVALUATE ARRAY		COMFIGURE		SEQUENCE CORE SYSTEM	- ''			TELEMETRY CONTROL	TELEMETRY	TELEMETRY		COMMUNICATION INTERFACE			COMMUNICATION EQUIPMENT	-		CONTROL	COMMUNICATION EQUIPMENT	SIATUS MURITUKING FAITIRE DETECTION AND		COMMUNICATION EQUIPMENT	FAILURE DETECTION AND	RECOVERY COMMUNICATION FOLLPHENT	CONTROL	COMMUNICATION EQUIPMENT	COMMAND PROCESSING	COMMUNICATION NEIWORK	
AND PROCESS NO	4.8.1.3	5.1.8.6	4.1.8.6	4.1.8.6	4.8.1.8	4.8.1.8	4.8.1.3	4.8.1.1	4.8.1.8	4.8.8.1	а. <del>4</del> .8	4.00.00.00.00.00.00.00.00.00.00.00.00.00	4		4.8.5.7	4.8.5.7	4.8.5.7	4.8.9.7	4.8.5.6	8.0.0		4.20.55	4.8.5.5	•		4.8.5.	4.8.5.4		4.20.55.20	4.8.5.4	<b>4</b> . 8. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6.		♣. m. a.	4.8.5.5	4.8.5.1	1
DATA FLOW HESSAGE	POWER PROFILE, LOAD SHEDDING	recomfigure/disconnect	GIMBAL CHANGE REQUESTS	GIMBAL POSITION	ELECTRICAL LOAD FORECAST, ABNORMAL POWER COUNTITION	POWER PROFILE, LOAD SHEDDING	POWER	REFERENCE OUTPUT	reconfigure/disconnect			DIAGNOSTICS	DIAGROSTICS					LIBE AVAILABILITY	EXECUTABLE COMMUNICATION	POINTING COORDINATES		CONFIGURATION, MODE COMMAND	VALIDATED COMMANDS	COMPIGHRATION MODE COMMAND		CONTROL SIGNAL RESPONSE	DIAGNOSTICS. RECONFIGURATION	COMMANDS	CONTROL SIGNAL RESPONSE	FAILURE INDICATOR	DIAGNOSTICS, RECONFIGURATION	COMMANDS	FALLURE INDICATOR	RECOVERY PROCEDURE	VALIDATED COMMANDS	
PROCESS NAME	CONFIGURE POWER	CONFIGURE POWER DISTRIBU-	POWER SOURCE MANAGEMENT	POWER SOURCE MANAGEMENT	POWER SOURCE MANAGEMENT	POWER SOURCE MANAGEMENT	PROJECT ENERGY AVAILABLE	PROJECT ENERGY AVAILABLE	RECOMFIGURE/DISCONNECT PAYLOAD/CORE SYSTEM		HANAGE THERMAL LOAD	HANAGE THERMAL LOAD	DEVICE MANAGEMENT (EXPERT		REALTIME	REALTIM	MONITOR DELAYED DATA	STORILOR DELAILD DAIA	DEERATION	DETERMINE POINTING HOUNT	1	COMPUNICATION NETWORK CONTROL	COMMUNICATION NETWORK	COMMUNICATION EQUIPMENT		COMMUNICATION EQUIPMENT CONTROL	COMMUNICATION EQUIPMENT	CONTROL	COMMUNICATION EQUIPMENT STATUS MONITORING		SIALURE DETECTION AND	7	RECOVERY	FAILURE DETECTION AND	RECOVERY COMMAND PROCESSING	
PROCESS	4.2.1.2	4.8.1.8	4.8.1.3	4.8.1.3	4.8.1.3	4.8.1.3	4.2.1.5	4.8.1.5	5.1.2.6	3.4.8	4.8.8.1	4.8.8.1	4.8.8.8		1.1.3	1.1. 1.1.3	 	ė	Ė	4.1.2.6		T. 0. 31.	4.2.5.1	<b>4</b> .8.5		4.8.5	4.8.5.2	1	4.8.5.5 5.5	4.8.5.3	4.8.5.4		•	4.8.5.4	4.2.5.5	
HODE	H	H	0	<b>H</b>	<b>H</b>	0	H	0	0	0	н	н	0		0 1	<b>-</b> (	<b>&gt;</b> +	٠ (	>	0	•	>	<b>H</b>	H		н	H	,	0	0	0		•		0	
TEVEL	n	n	ຄ	ю	n	B	ຄ	8	n	n	<b>n</b>	ю	ຄ	I	ומ	9 1	0 11		3	ຄ		o	n	n		n	10	1	n	ຄ	ស	r	•	n	n	
FUH MO	4.2.1	4.8.1	4.8.1	4.8.1	4.8.1	4.8.1	4.8.1	4.8.1	4.2.1	4. 8.	₩. 8.	8.8.8	<b>4</b> .8.8		•			٠		4.8.5	•	P	4.8.5	£.8.5	,	 	4.8.5	(		F. 20.55	8.8	9		F. 20.55	8.8.1	

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Pag	RND PROCESS NO AND PROCESS NAME	CONTROL FAILURE DETECTION AND PECOTEDY	COMMUNICATION INTERFACE	COMMUNICATION INTERFACE	CONTROL TELEMETRY CONTROL	SEQUENCE CORE SYSTEM	POINTING HOUNT CONTROL	COMMAND PROCESSING	COMMAND PROCESSING	TELEMETRY CONTROL		MONITOR REALTIME DATA	DELAYED I		COMMAND PROCESSING	COMMUNICATION INTERFACE CONTROL	AUTOMATIC CONTROL	PROCESSING CANTION AND WARMING		FIRE DETECTION AND CONTROL	MONITOR CORE SYSTEM	BIALUS MOMITOR CUSTOMER SYSTEM		MASS PROPERTIES CONFIGURATION UPDATE	SYSTEM TEST AND EVALUATION	AUTOMATIC CONTROL PRO-	6	STATUS	HOWITOR CORE SYSTEM	MOMITOR CUSTOMER SYSTEM	STATUS FAULT AMALYSIS	SYSTEM TEST AND	EVALUATION OPERATOR CORE SYSTEMS	ABNORMAL AND EMERGENCY
	ZND PROCESS N	4.8.5.	<b>4</b> . a. a. a. a	4.8.5.6	4.8.5.7	a. 4.	4.1.8.6	♣. 10 . 01 . 15	4. 6. 7.	4.10.15.7		0 F	. a.	1.8.3	4.2.5.5	♣. છ. લ ⊕. ઉ	4.3.2.3	4. S. S.	!	4.10.4.15	4.5.1	4.8.8	1	n. e. ♣	4.5.5	4.3.8.3	7	1 · 0 · F	4.5.1	4.5.20	4.5.4.1	<b>4</b> .8.8	•.0	4.3.20
EXSOURCES	DATA FLOW MESSAGE	RECOVERY PROCEDURE	COMMUNICATION COMMAND DISPOSITION	COMMUNICATION COMMANDS		EXECUTABLE COMMUNICATION COMMANDS	POINTING COORDINATES	COMMUNICATION COMMANDS	COMMUNICATION COMMAND DIS-	TELEMETRY REQUIREMENTS	TIME AUSTIABLITUM	LIME REQUIREMENTS				TELEMETRY REQUIREMENTS	AUTOHATIC EMERGENCY COMMANDS	PRESSURE SHELL PENETRATION	FIRE ALERI	PRESSURE SHELL PEWETRATION, FIRE ALERT	ABNORMAL AND EMERGENCY COM-	ABNORMAL AND EMERGENCY		CONDITIONS	PAYLOAD SYSTEM FAULT	ABHORMAL AND EMERGENCY AUTO-	ABRORMAT AND EMPROPER	CONDITION DATA	ABNORMAL AND EMERGENCY	ABOUTIONS ABOUT AND EMERGENCY	CONDITIONS ABNORMAL CONDITIONS	PAYLOAD SYSTEM, FAULT	AUTOMATIC EMERGENCY COMMANDS	ABNORMAL AND EMERGENCY AUTO-
	PROCESS NAME	COMMAND PROCESSING	COMMAND PROCESSING	COMMAND PROCESSING	<b>CO</b>	COMMUNICATION INTERFACE CONTROL	COMMUNICATION INTERFACE CONTROL	COMMUNICATION INTERFACE CONTROL	COMMUNICATION INTERFACE	COMMUNICATION INTERFACE	TELEMETRY CONTROL		CONT	CONT	CONT	TELEBEIKY CONIKOL	OPERATE CORE SYSTEMS	FIRE DETECTION AND		CAUTION AND WARMING	CAUTION AND WARNING	CAUTION AND WARNING	Cutudes due notting		CAUTION AND WARNING	ABNORMAL AND EMERGENCY	ABRORMAL AND EMERGENCY	i	ABNORMAL AND EMERGENCY PROCEDURES	ABBORNAL AND EMERGENCY	ABNORMAL AND EHERGENCY	PROCEDURES ABBORNAL AND EMERGENCY	PROCEDURES AUTOMATIC CONTROL PRO-	CESSING AUTOMATIC CONTROL PRO-
	PROCESS	4. 6. 10. 10.	4.20.55.55	♣. æ. ਯ.	16		4.2.5.6	4.8.5.6	4.2.5.6	4.8.5.6	7 8 8 7	10	NO.	ri I	4.10.01.1	ρ.	<b>•</b> .0	4.8.4.5	•	<b>4</b> . 8. 1. 8. 1	4.3.8.1	4.3.2.1	4	: :	4.3.8.1	<b>4</b> .3.8.8	4.3.8.8		4.3.8.8	4.3.8.8	4.3.8.8	4.8.8	£.3.8.3	4.3.2.3
	HODE	0	0	н	01	-	<b>H</b>	0	H	0	c	н	0	н	H	4	H	0	1	н	H	н	۰		H	0	H	1	н	H	H	н	0	H
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21 -Jul-1985	FUN NO L	4. 8.	<b>4</b> . 8. 50 €	4. 64. 65. 65. 65. 65.			4. 8. 5	₽. a. s	4. a. s	4.2.5	4. S. S.		♣. 23 . 55	ai e			<b>4</b> .3.a	4.3.8		  	4.3.8	4.3.2	4 E	) )	<b>4</b> .8 8.8	4.3.2	4.3.8		લ લ	4.3.8	4.3.2	4.3.2	4.3.8	4.3.8

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NO AND PROCESS NAME	PROCEDURES CAUTION AND WARNING	ABHORMAL AND EMERGENCY	PROCEDURES CAUTION AND WARNING	ABBORNAL AND EMERGENCY	PROCEDURES	CAUTION AND WARNING	AHBHORMAL AND ENERGENCY	FROCEDURES ABBORNAL AND EMERGENCY	PROCEDURES CAUTION AND WARNING	- TOTAL STATE OF THE STATE OF T	ABBORDAL AND EMERGENCY PROCEDURES	RELATIVE ALIGNMENT	DETERMINE POINTING HOUNT	SYSTEM TEST AND	EVALUATION SYSTEM TEST AND FVATHATION	HOWITOR CORE SYSTEMS	STATUS MOMITOR CUSTONER SYSTEMS	STATUS	MANN FROFERTIES CONFIGURATION UPDATE	SYSTEM TEST AND EVALUATION	HONITOR CORE SYSTEMS	RIATUS MOMITOR CUSTONER SYSTEMS		MAKS PROPERTIES	DIAGNOSTICS SUPPORT	SYSTEM TEST AND		CAUTION AND WARNING	ABHORMAL AND EMERGENCY	PROCEDURES DIAGNOSTICS SUPPORT		SYSTEM TEST AND EVALUATION	CAUTION AND WARNING
RND PROCESS	4.3.8.1	4.3.8.8	4.3.8.1	4.03.00.00		4.00.20.2	4.3.8.8	4.3.9.9	4.3.8.1	6		4.4.1.4	4.1.8.6	₩. ₩.	₽. a. a	4.5.1	₩. ₩.		? •	. S B	4.5.1	<b>♣</b> . <b>6</b> . <b>1</b>	1	o. •	4.8.4	4.8.8	; ;	4.3.8.1	4.3.2.2	4.8.4		.a. .a.	4.3.8.1
DATA FLOW HESSAGE	MATIC PROCEDURES ABHORMAL AND EMERGENCY	CONDITIONS ABHORMAL AND EMERGENCY	CONDITIONS ABBORNAL AND EMERGENCY	ABNORMAL AND EMERGENCY	82	COMDITIONS	ABNORHAL AND EMERGENCY	ABHORMAL COMDITIONS	PATLOAD SYSTEM FAULT	PAVIOAD SVSTEM TAILT		COORDINAIE ALIGNHENT RELIEF	COORDINATE ALIGNMENT RELIEF	TEST RESPONSES	TEST ROUTINES	ABBORNAL AND EMERGENCY	ABNORHAL AND EMERGENCY	CONDITIONS ADMOBRAT AND PRESCUENCE	CONDITIONS	PAYLOAD SYSTEM FAULT	ABNORMAL AND EMERGENCY	CONDITIONS ABNORMAL AND EMERGENCY	COMDITIONS ABSOLUTIONS ABSOLUTIONS		ABNORMAL CONDITIONS	PAYLOAD SYSTEM FAULT	AND THE THE TARREST OF THE TARREST O		ABMORMAL AND EMERGENCY	CONDITIONS OUT OF TOLERANCE CONDITIONS		required system test	ABHORMAL AND EMERGENCY
PROCESS NAME	CESSING MONITOR CORE SYSTEM STATES	MONITOR CORE SYSTEM STATUS	MONITOR CUSTOMER SYSTEM	HONITOR CUSTOMER SYSTEM	SIATUS MAGG BBABTTES	CONFIGURATION UPDATE	MASS PROPERTIES	200	SYSTEM TEST AND	EVALUATION SYSTEM TEST AND		DETERMINE POINTING MOUNT CONTROL	RELATIVE ALIGNHENT DETERMINATION	OPERATE CORE SYSTEM	OPERATE CORE SYSTEM	CAUTION AND WARNING	CAUTION AND WARNING	CAUTION AND WARNING		CAUTION AND WARNING	ABHORMAL AND EMERGENCY PROCEDURES	ABNORMAL AND EMERGENCY	PROCEDURES ABNOBHAT AND THEBSTERS	. S	ABNORMAL AND EMERGENCY	ABBORNAL AND EMERGENCY	PROCEDURES MOMITOR CORE SYSTEMS		MOWITOR CORE SYSTEMS	HOWITOR CORE SYSTEMS	4900	CORE SYST	MONITOR CUSTOMER SYSTEMS
PROCESS	4.5.1	4.8.1	£.5.2	4.5.8			<b>4</b> .α.α	1.5.4.1	4.5.5	. ii.	) 	1.2.8.6	4.4.1.4	<b>•</b> .0	•·•	.3.8.1	.3.8.1	1.8.1		.8.8.1		3.8.8	o o	<u>:</u>	3.8.8	3. g. g	1.8.1	)	4.5.1	4.5.1		<b>4</b> .5.1	4.5.B
HODE	•	0	0	•	c	•	0	•	0	0	ı	<b>▼</b> H	•	0	<b>H</b>	<b>₹</b>	<b>+</b>	<b>4</b>		H	<b>4</b>	<b>+</b>	4	ı	<b>+</b>	<b>≠</b>	0	,	•	•			•
LEVEL	ຄ	n	ຄ	ຄ	ť	•	ກ	ຄ	ຄ	10	ı	ຄ	n	œ	CQ2	œ	œ	æ	1 1	CE .	œ	Œ	α		æ	œ	œ		œ	œ		_	Q.
FUN NO LE	4. 3. s	4.3.8	4.3.8	4.3.8	4 8 9		<b>4</b> . w	4.3.8	4.3.8	<b>♣</b> . ಚ. ಜ		4.4.3	4.4.1	<b>₽</b> .	<b>₽</b> . 8	<b>₽</b> .	<b>4</b> . <b>3</b>	ıo. <b>→</b>	, ,	<b>4</b> . ∞.	<b>4</b> .0	<b>4</b> .8	4	,	. a	₽· <b>4</b>	بر دور	) •	₽. <b>₽</b>	<b>₽</b>	4	ė.	<b>₽</b>

SHD PROCESS NO SHD PROCESS NAME	4.3.8.8 ABHORMAL AND EHERGENCY	PROCEDURES 4.3.8.1 CAUTION AND WARNING	A.S. S. S. A.S. TANGORDA & S. S. A.	PROCEDURES	4.3.8.8 ABNORMAL AND EMERGENCY	4.5.1 HOUSEDINGS SYSTEMS	4.0 OPERATE CORE SYSTEM	4.0 OPERATE CORE SYSTEM	4.3.8.1 CAUTION AND WARNING	4.3.8.8 ABNORMAL AND EHERGENCY	4.5.1 HOWITOR CORE SYSTEMS	STATUS 4.5.1 FAULT ANALYSIS	4.5.4.1 FAULT AMALYSIS	4.3.8.8 ABHORMAL AND EMERGENCY	4.5.4.1 MONITOR CORE SYSTEMS	4.5.4.8 FAULT CORRECTION	4.3 TREND	.4.3 TREND	4.1 FAULT	4.5.4.1 FAULT AMALYSIS	MAKAGE	FACILITIES	4.2 OPERATE NON-GN & C CORE	5.2 HANGE GROUND SYSTEM	FACILITIES 5.2 HANAGE GROUND SYSTEM	FACILITIES	5.1 HANAGE FLIGHT SYSTEM FACILITIES	5.1 MANAGE FLIGHT SYSTEM FACILITIES
DATA FLOW MESSAGE	CONDITIONS ABHORHAL AND EMERGENCY	CONDITIONS ABNORMAL AND EMERGENCY	CONDITIONS ABNORMAL AND EMERGENCY	20	ABHORMAL COMDITIONS	OUT OF TOLERANCE CONDITIONS	TEST RESPONSES	TEST ROUTINES	PATLOAD SYSTEM FAULT	PAYLOAD SYSTEM FAULT	REQUIRED SYSTEM TEST	ABHORMAL CONDITIONS	OUT OF TOLERANCE CONDITION	ABNORMAL CONDITIONS	OUT OF TOLERANCE CONDITION	HOM-STANDARD FAULT		ABRORMAL TRENDS	HOM-STANDARD FAULT	ABRORMAL TRENDS			AECOMFIGURE, DISCORNECT	TDRSS REQUEST	TDRSS SCHEDULED			TDRSS SCHEDULED
PROCESS NAME	STATUS MOMITOR CUSTOMER SYSTEMS	MASS PROPERTIES	COMPLICATION OF DAIL MASS PROPERTIES		DIAGNOSTICS SUPPORT	DIAGNOSTICS SUPPORT	SYSTEM TEST AND	EVALUATION EVALUATION	SYSTEM TEST AND EVALUATION	SYSTEM TEST AND EVALUATION	STREET TEST AND TOTAL TEST AND	EVALUATION ABNORMAL AND EMERGENCY PROCEDURES	HOWITOR CORE SYSTEMS	FAULT AMALYSIS	FAULT AMALYSIS			FAULT AMALYSIS			OPERATE NON-GN & C CORE	SYSTEMS MANACH HITCH COLUMN		MANAGE FLIGHT SYSTEM	HANGE FLEGHT SYSTEM	FACILITIES MANAGE GROUND SYSTEM		MANAGE GROUND SYSTEM FACILITIES
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#### APPENDIX F

#### SIMULATION AND MODELING

#### F.1 OBJECTIVES OF SIMULATION

Simulations for the SSDS study are meant to provide an easy-to-use and cost-effective method of analyzing various portions of the data system on various levels. Development of the simulation models involves four major objectives:

- 1) Quantify resources required
- 2) Develop parametric sensitivities
- Quantify system architecture performance to support design evaluation
- 4) Initiate at top level and expand/grow to model lower levels of detail

There are three simulation tools described below which have been utilized with these objectives in mind. The Data System Dynamic Simulation program provides very high level simulation models, while the Performance Analyst's Workbench System and Research Queueing Package (RESQ) programs have been used for the more detailed low level simulations. Together, these tools are used to support the Space Station Data System trade studies.

#### F.2 DESCRIPTION OF SIMULATION TOOLS

The three simulation tools used to develop models pertaining to the Space Station Data System are the Performance Analyst's Workbench System (PAWS), Data System Dynamic Simulation (DSDS), and Research Queueing Package (RESQ) simulation programs. Figure F.1 shows the method of approach in using the simulation tools and their relationship to the mission models. The following is a brief description of these tools.

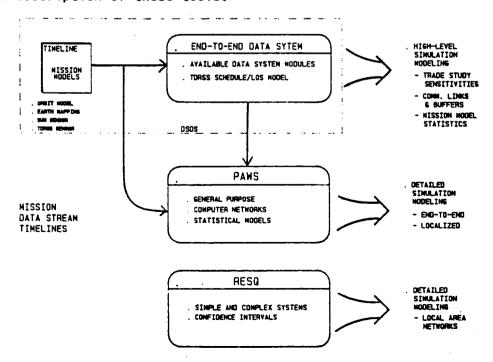


Figure F.1 Simulation Tool Approach

#### Performance Analyst's Workbench System

PAWS, developed by Information Research Associates, is a software simulation tool hosted at MDAC on a VAX 11/780 computer. PAWS enables the analyst to model computer architectures, communication networks, data flow scheduling algorithms, distributed data base systems, and distributed processing systems. The simulation model can be quickly translated from a pictorial representation of a data network, formed by the PAWS "building block" technique, into an accurate model written in the PAWS simulation language. The language can be learned in a few days and employs very high level primitives, so most PAWS models are short and can be developed quickly, thus making PAWS a "user-friendly" simulation tool. Statistics produced by the program are extensive and include node throughputs, queue lengths, queueing times, and response times. Specific SSDS applications of PAWS include local area network. architecture comparisons, the FDDI token ring and FODS in particular. Section 3 contains modeling details of each architecture and the results are shown in section 4.

#### Data System Dynamic Simulation (DSDS)

DSDS was originally developed by General Electric for NASA Marshall Space Flight Center in 1975 (see Figure F.2) and is also hosted at MDAC on a VAX 11/780 computer, using interactive Tektronix terminals. The primary objective of DSDS is to provide a quick and easily understood method for simulating data The data system model (DSM) is built by interconnecting data system element models (DSEMs) which represent physical elements such as ground stations, antennas, orbiting satellites, etc. and various logical functions. DSDS is an excellent tool for modeling Space Station mission timelines as well as high level models of the Space Station Data System. Special purpose DSEMs used to develop the mission models which are triggered by some deterministic include orbiting satellites (SS, COP, POP), sun sensor models (craft/nadir point status), TDRSS models (LOS analysis), and map sensor models (land/water status). Other missions requiring random processes to develop a timeline schedule make use of DSDS' random number generators. DSDS simulation results include response times, queueing statistics, throughput, device utilization reports, and graphic displays.

#### Research Queueing Package (RESQ)

The Research Queueing Package (RESQ), an IBM product, is an interactive modeling tool for constructing and solving queueing network models of both simple and complex systems. Both analytical and simulation results can be obtained using RESQ. The discrete event simulation capabilities allow modeling of sytems involving simultaneous resource possession. With these techniques, the complexities of the system can be modeled and performance statistics, including utilization, throughput, queueing time, etc... can be obtained. RESQ provides a hierarchical development approach which utilizes submodels as building blocks to create complex models.

In addition, RESQ provides the capability to indicate the accuracy of the simulation using "confidence intervals". The length of the simulation can also be controlled through user established stopping rules.

Specific RESQ models include the token ring and CSMA/CD network architectures. The simulation results from each of these models were compared as a calibration exercise to analytical results obtained using equations derived by Werner Bux, IBM-Zurich, Switzerland, in "Local Area Subnetworks: A Performance Comparison", IEEE Transactions on Communications, Oct. 1981, as a calibration exercise.

The analytical results were obtained using the equations derived by Werner Bux in an existing APL program. The parameters were varied in order to observe the effect on performance. The analytical results for the token ring and CSMA/CD model are shown in section F.4.

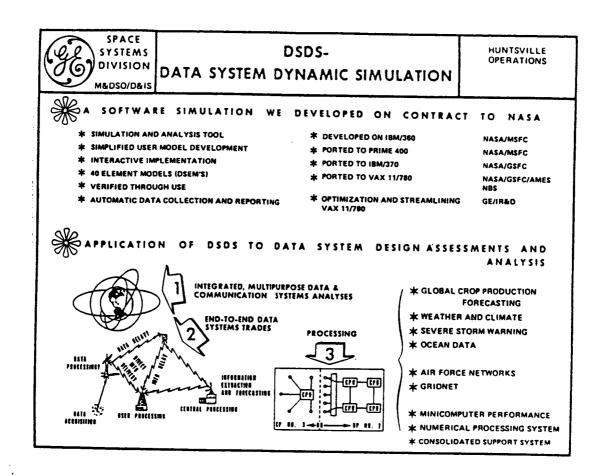


Figure F.2 Data System Dynamic Simulation - DSDS

## F.3 SYSTEM MODELS AND ASSUMPTIONS

Three major categories of simulations have been modeled for the Space Station Data System: 1) Mission scenario model, 2) End-to-end model, and 3) Local area network models. Each group is represented by a diagram which describes the logic of the system modeled, along with a set of assumptions and user inputs required to run the simulation and produce results as shown in section 4.

#### Mission Model

Table F.1 presents all IOC and growth missions from the Woods Hole data base for the space station, co-orbiting platform, and polar orbiting platforms. The table provides the mission number, name, yearly operational percentage, data rate, total duration of "on" time, number of times per day the mission is turned on, the average daily data rate, the average yearly data rate, origination, mission trigger (determinant for turning on the mission), date of mission, destination, and delivery time (establishes priority among the missions). Other fields of the table were not entered into the mission model, but are provided for full mission background information. The information utilized in the table was entered into a data system model using DSDS to create mission timelines for all system analysis models.

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Figure F.3 gives an overview of the mission model scenario. Two sample DSDS mission models are shown in figure F.4. Assumptions for the mission model are as follows:

- . SS, COP apogee of 500 Km
- . SS, COP inclination angle of 28.5 degrees
- . POP apogee of 700 Km
- . POP inclination angle of 98.2 degrees

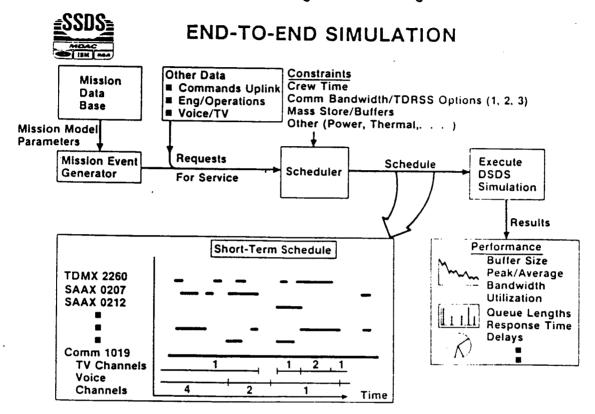
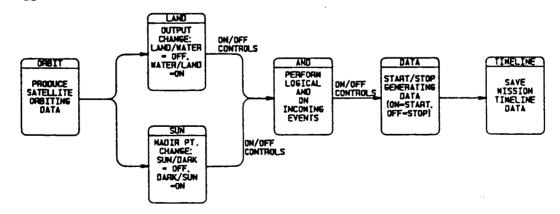


Figure F.3 Mission Model Overview

Trigger = Sunlit Land



Trigger - Poisson process, Data 'on' time - 30 minutes

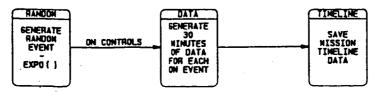


Figure F.4 Sample DSDS Mission Models

#### End-to-End Network Model

The end-to-end network was modeled with DSDS for both IOC and growth missions from the mission model described in the previous section. There are three different configurations (one configuration for space and three for ground) shown in figure F.5. All missions with data rates below 10 Mbps were combined as one low rate continuous mission for SS, COP, and POPs (one for each). Ground link bandwidths were determined by the average input rate at a particular buffer. The following additional assumptions for the end-to-end network model are as follows:

- One, two, or three TDRSS SA links of 300 Mbps bandwidth each
- . TDRSS SA channels are modeled as resources:
  - 3 SA links are modeled as follows: Five repetitive 20 minute zones of non-contact during which the SA channels are taken away:
  - 1) 1 from SS, 1 from POP1
  - 2) 2 from SS
  - 3) 2 from POP1
  - 4) 1 from POP1, 1 from POP2
  - 5) 1 from SS, 1 from POP2
  - 2 SA links are modeled as follows: Two simultaneous sets of three repetitive zones-of-contact during which the SA channels are available (Set 1 starts with zone 1, Set 2 starts with zone 2):
    - 1) POP1 for 45 minutes
    - 2) SS for 25 minutes
    - 3) POP2 for 10 minutes
  - 1 SA link is modeled with three zones-of-contact during which the SA channel is available:
    - 1) POP1 for 45 minutes
    - 2) SS for 25 minutes
    - 3) POP2 for 10 minutes
- . IOC high rate missions are:

Source	RDC	Mission #	Priority
SS	GSFC	COMM1014	2
SS	GSFC	SAAX0207	1
POP1	GSFC	COMM1019	2
POP1	GSFC	SAAX0209	2
POP1	GSFC	SAAX0228	2
POP2	JPL	SAAX0212	2

. Growth high rate missions are:

Source	RDC	Mission #	Priority
SS	GSFC	COMM1014	2
SS	GSFC	SAAX0011	2
SS	LANG	SAAX0227	ī
POP1	GSFC	COMM1019	2
POP1	GSFC	SAAX0209	2
POP1	GSFC	SAAX0228	2
POP2	JPL	SAAX0212	2

- . All low rate combined continuous missions are sent to GSFC
- IOC low rate combined continuous missions are given priority level 3

DSDS simulation model results for one, two, or three SA links using the IOC end-to-end configuration are shown in section F.4.

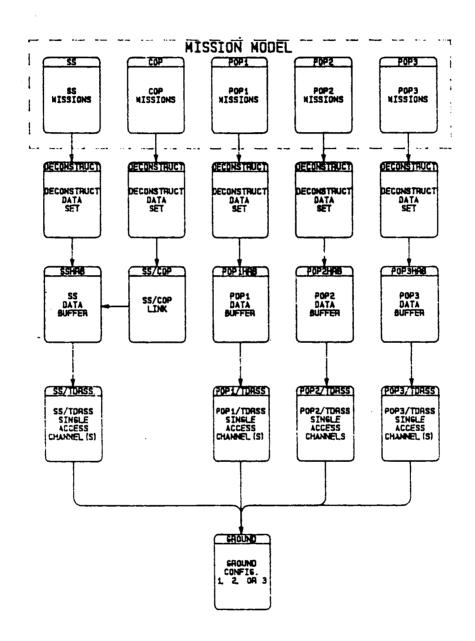


Figure F.5-a DSDS End-to-End Simulation Model (Space)

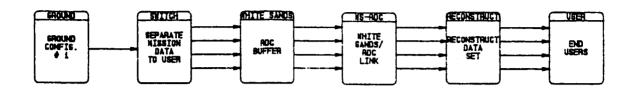


Figure F.5-b DSDS End-to-End Simulation Model (Ground Configuration #1)

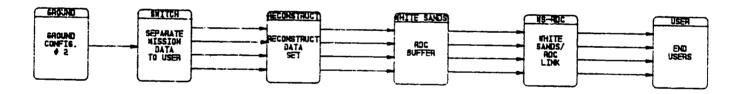


Figure F.5-c DSDS End-to-End Simulation Model (Ground Configuration #2)

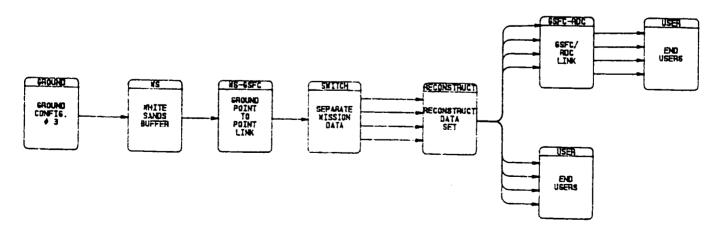


Figure F.5-d DSDS End-to-End Simulation Model (Ground Configuration #3)

#### Buffering Analysis Model

The buffering analysis model was developed using DSDS to support the end-to-end network effort for the SSDS study. The DSDS model configuration is shown in figure F.6 and the assumptions used are as follows:

- . Zone of "non-contact" for n minutes
- . SA link bandwidth of b Mbps

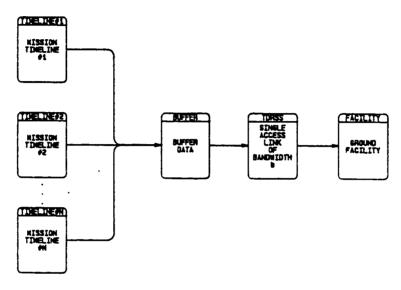


Figure F.6 DSDS Buffer Simulation Model

#### Local Area Network Models

The local area network architectures that have been modeled for the Space Station Data System study are fiber distributed data interface, fiber optic demonstration system, token ring, and carrier sense multiple access with collision detection. These LAN simulation models are parametric sensitivities as opposed to mission model driven.

## Fiber Distributed Data Interface (FDDI) Token Ring

The Fiber Distributed Data Interface (FDDI) token ring architecture shown in figure F.7, is modeled using the following assumptions with PAWS:

- . 500, 1000, 2048 byte data packets
- . 28 byte header
- . 11 byte token
- 100 Mbps effective bandwidth (Ignores 4 for 5 symbol encoding)
- . 50 m arm length between BIUs
- 5 usec/Km propogation speed
- 5 nodes
- . Non-redundant configuration
- . No transmission errors

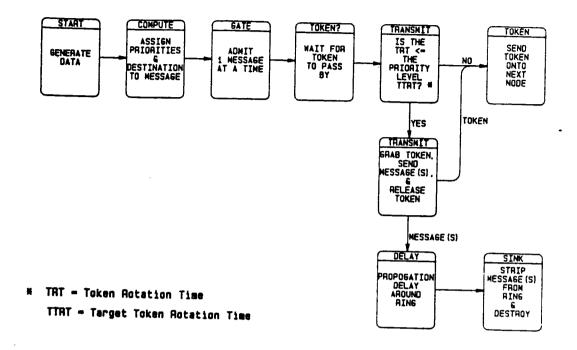


Figure F.7 PAWS Model of FDDI logic for one node

## Fiber Optic Demonstration System (FODS)

The Fiber Optic Demonstration System (FODS) data bus, also modeled with PAWS, is shown in figure F.8. The PAWS FODS model assumptions are:

- . 500, 1000, or 2048 byte data packets
- . 15 byte header plus trailer
- . 100 Mbps bandwidth
- . 25 m star arm length (50 m total between BIUs)
- 5 usec/Km propogation speed
- . 5 nodes
- . Tgap = 1.6 usec

(gap time after each transmission)

- . Tsw = 1.6 usec
  - (time slot width)
- Random delay after controlled access mode = 0.0 to 1.6 usec (step size of 0.1 usec)
- . Non-redundant configuration
- . No transmission errors

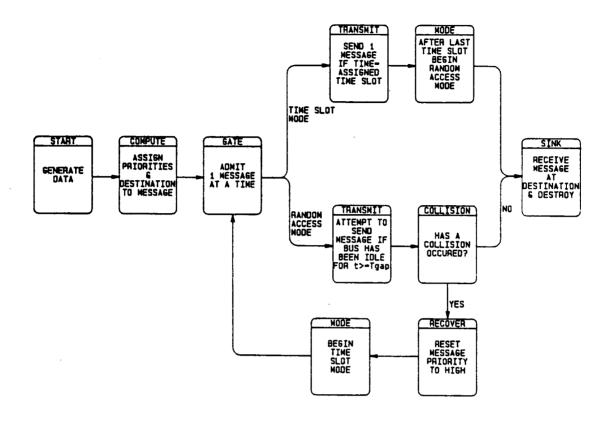


Figure F.8 PAWS Model of FODS Logic For One Node

## Token Ring

The token ring architecture was modeled with RESQ and its logic is shown in figure F.9. Characteristics of the model are as follows:

- . 46 byte data packets
- . 21 byte header
- . 3 byte token
- . 10 Mbps bandwidth
- . 12 Km total ring length
- . 5 usec/Km propogation delay
- . 1.5 bit delay per node
- . 3 byte delay per message
- . 10 nodes
- . All nodes have equal priority
- . Non-redundant configuration
- . No transmission errors

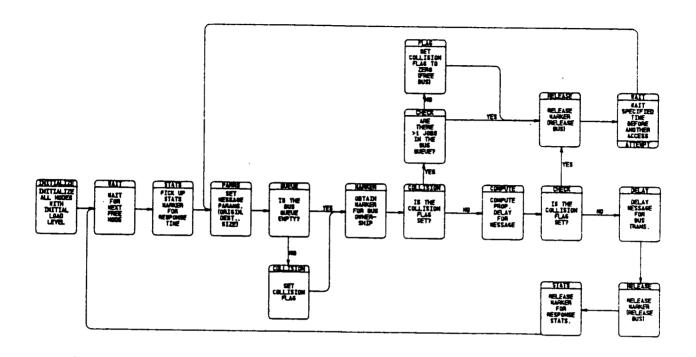


Figure F.9. RESQ CSMA/CD Simulation Logic for One Node

Carrier Sense Multiple Access with Collision Detection (CSMA/CD)

The CSMA/CD bus architecture, also modeled with RESQ, is represented in figure F.10. The parameters used for the simulation model are as follows:

- . 46 byte data packets
- . 38 byte overhead
- . 3.47 Km effective cable length
- . 10 Mbps bandwidth
- . 5 usec/Km propogation delay between nodes
- . 100 nodes
- . All nodes have equal priority
- . 96 byte interframe spacing
- . 168 usec delay for retry
- . Non-redundant configuration
- . No transmission errors

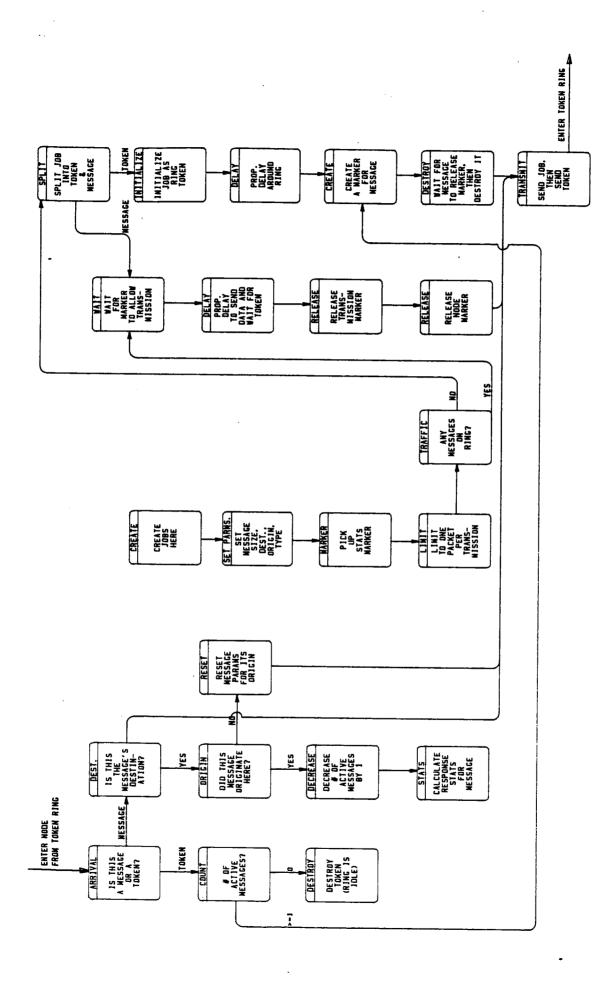


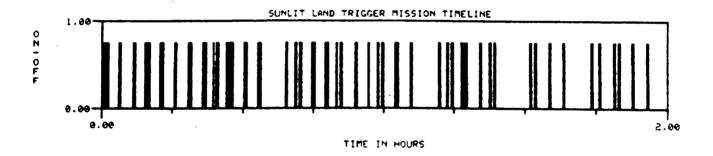
Figure F.10. RESQ Token Ring Simulation Logic for One Node

#### F.4 SIMULATION RESULTS

The following diagrams illustrate performance results for each simulation model described in section 3.

#### MISSION MODEL SCENARIO

Timelines for the two DSDS sample space station missions referred to in figure F.4 are shown below in figure F.11. Dark areas for both timelines indicate a "trigger on" condition.



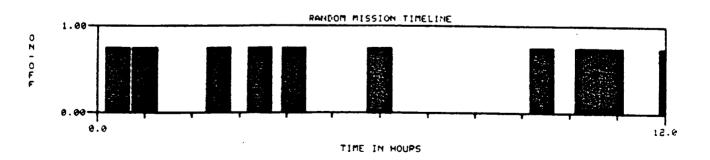


Figure F.11 Sample DSDS Space Station Mission Timelines

## END-TO-END NETWORK SIMULATION RESULTS

## **Buffering Analysis**

All simulation results of the end-to-end network model are for a 24 hour simulation period. Table F.2 shows the buffer loading results for IOC onboard the Space Station and POPs. Ground buffer loading, shown in Table F.3, represents ground configurations 1 & 2, and 3 (results for ground configs. 1 & 2 are the same). Ground link bandwidths were determined by the mean input data rate for each buffer:

#### IOC ground link bandwidths

- . White Sands to JPL = 21 Mbps \
- . White Sands to GSFC = 75 Mbps/ Ground configs. 1,2
- . White Sands to GSFC = 100 Mbps\
- GSFC to JPL = 21 Mbps / Ground config. 3

## Timing and Resource Analysis

Resource utilization and response time results are shown in tables F.4 and F.5 for the IOC end-to-end simulation model. The resource utilization results are for each ground point-to-point link. Response times given are from data generation time to data delivery time ( to the end user).

100	BUFFER	HEAN LOAD IN BITS	MAXIMUM LOAD IN BITS
1 SA LINK	SS	11.412 X 10E9	219.6 X 10E9
	P0P1	45.099 X 10E9	510.3 X 10E9
	POP2	88.137 X 10E9	351.9 X 10E9
2 SA LINKS	SS	4.797 X 10E9	216.9 X 10E9
	POP1	2.772 X 10E9	82.8 X 10E9
	POP2	30.672 X 10E9	245.7 X 10E9
3 SA LINKS	SS	3.024 X 10E9	176.4 X 10E9
	POP1	2.691 X 10E9	63.9 X 10E9
	POP2	8.919 X 10E9	233.1 X 10E9

Table F.2 DSDS Onboard Buffer Loading Simulation Results

	IOC Ground Configs. 1 6	2	! !	IOC GROUND CONFIG. 3	
	BUFFER MEAN LOAD IN BITS	MAXIMUM LOAD IN BITS	! BUFFER !	MEAN LOAD IN BITS	MAXIMUM LOAD IN BITS
1 SA	JPL 146.619 X 10E9 (AT WHITE SANDS)	441. X 10E9	! ! WHITE! ! SANDS	163.26 X 10E9	513. X 10E9
LINK	GSFC 126.315 X 10E9 (AT WHITE SANDS)	391.5 X 10E9	JPL (AT GSFC)	125.361 X 10E9	394.2 X 10E9
2 SA	JPL 172.8 X 10E9 (AT HHITE SANDS)	513. X 10E9	WHITE SANDS	252.054 X 10E9	683.1 X 10E9
LINKS	GSFC 157.41 X 10E9 (AT HHITE SANDS)	487.8 X 10E9	! JPL ! (AT GSFC)	153.558 X 10E9	477.9 X 10E9
3 SA	JPL 178.164 X 10E9 (AT WHITE SANDS)	538.2 X 10E9	WHITE SANDS	272.07 X 10E9	706.5 X 10E9
LINKS	GSFC 165.663 X 10E9 (AT WHITE SANDS)	497.7 X 10E9	JPL (AT GSFC)	128.043 X 10E9	435.6 X 10E9

Table F.3 DSDS Ground Buffer Load Simulation Results

	G	ROUND CONFIGS. 1 &	2	!	GROUND CONFIG. 3	
	RESOURCE	UTILIZATION	BANDWIDTH	! RESOURCE	UTILIZATION	BANDWIDTH
IOC 1 SA	WS-JPL LINK	82.87 %	21 MBPS	: ! HS-GSFC ! LINK	79.9 %	100 MBPS
LINK	HS-GSFC LINK	81.98 %	75 MBPS	GSFC-JPL LINK	82.84 %	21 MBPS
IOC 2 SA	WS-JPL LINK	84.22 %	21 MBPS	HS-GSFC	80.11 %	100 MBPS
LINKS	HS-GSFC LINK	80.98 %	75 M8PS	! GSFC-JPL ! LINK	80.67 %	21 MBPS
IOC 3 SA	HS-JPL LINK	84.95 %	21 MBPS	! WS-GSFC ! LINK	80.125 %	100 MBPS
LINKS	HS-GSFC LINK	82.27 %	75 MBPS	! GSFC-JPL ! LINK	83.378 %	21 MBPS

Table F.4 DSDS Resource Utilization Simulation Results

1 SA				CONFIGS. 1 & 2	CONFIGS. 1 & 2
LINK	SOURCE	RDC	HISSION #	MEAN RESPONSE TIME	MAX RESPONSE TIME
IOC	SS	GSFC	CO1111014	46 MIN 27 SEC	1 HR 13 MIN 50 SEC
MISSIONS	SS	GSFC	SAAX0207	22 MIN 59 SEC	55 MIN 35 SEC
1	POP1	GSFC	COM1019	47 MIN 38 SEC	2 HRS 1 MIN 7 SEC
	POP1	GSFC	SAAX0209	47 MIN 40 SEC	2 HRS 1 MIN 16 SEC
	POP1	- GSFC	SAAX0228	47 MIN 21 SEC	2 HRS 37 SEC
	POP2	JPL	SAAX0212	3 HRS 30 MIN 59 SEC	7 HRS 37 MIN 40 SEC
			W14/0E12	0 1M3 30 11111 33 3EC	7 NAS 57 IIII 40 SEC
1 SA	2017.07			CONFIG. 3	CONFIG. 3
LINK	SOURCE	RDC	HISSION #	MEAN RESPONSE TIME	MAX RESPONSE TIME
100	SS	GSFC	CO111014	33 MIN 5 SEC	1 HR 7 MIN 59 SEC
MISSIONS	SS	GSFC	SAAX0207	22 HIN 19 SEC	55 MIN 31 SEC
	POP1	GSFC	COM1019	47 MIN 46 SEC	1 HR 46 MIN 25 SEC
	POP1	6SFC	SAAX0209	47 MIN 47 SEC	1 HR 46 MIN 33 SEC
	POP1	6SFC	SAAX0228	46 MIN 3 SEC	1 HR 41 MIN 17 SEC
	POP2	JPL	SAAX0212	3 HRS 37 MIN 10 SEC	7 HRS 37 HIN 52 SEC
2 SA		·		CONFIGS. 1 & 2	CONICTOR 4 6 5
LINKS	SOURCE	RDC	MISSION #	MEAN RESPONSE TIME	CONFIGS. 1 & 2 MAX RESPONSE TIME
IOC		0050			
	SS	GSFC	CO1111014	45 MIN '24 SEC	1 HR 38 MIN 56 SEC
MISSIONS	SS	GSFC	SAAX0207	4 MIN 2 SEC	20 MIN 9 SEC
	POP1	GSFC	COM1019	43 MIN 2 SEC	1 HR 49 MIN 35 SEC
	POP1	GSFC	SAAX0209	43 MIN 3 SEC	1 HR 49 MIN 44 SEC
	POP1	6SFC	SAAX0228	43 MIN 32 SEC	1 HR 49 MIN 5 SEC
	POP2	JPL	SAAX0212	3 HRS 2 MIN 46 SEC	7 HRS 18 MIN 8 SEC
2 SA				CONFIG. 3	CONFIG. 3
LINKS	SOURCE	RDC	MISSION #	MEAN RESPONSE TIME	MAX RESPONSE TIME
IOC	SS	GSFC	CO111014	35 MIN 42 SEC	1 HR 4 MIN 11 SEC
MISSIONS	SS	GSFC	SAAX0207	3 MIN 50 SEC	20 MIN
	POP1	GSFC	COMM1019	46 MIN 14 SEC	1 HR 53 MIN 18 SEC
	POP1	GSFC	SAAX0209	46 MIN 12 SEC	1 HR 53 MIN 27 SEC
	POP1	6SFC	SAAX0228	42 MIN 8 SEC	1 HR 52 MIN 58 SEC
	POP2	JPL	SAAX0212	3 HRS 52 MIN 23 SEC	8 HRS 9 MIN 16 SEC
		<b>∀1 </b>		Jac 62 titis ac cini o	0 111/2 3 1111/4 10 3CC
3 SA	COURSE	5.2.0		CONFIG. 1 & 2	CONFIG. 1 & 2
LINKS	SOURCE	RDC	MISSION #	MEAN RESPONSE TIME	MEAN RESPONSE TIME
100	SS	GSFC	C01111014	47 MIN 13 SEC	1 HR 37 MIN 32 SEC
HISSIONS	SS	GSFC	SAAX0207	2 MIN 36 SEC	20 HIN 18 SEC
	POP1	GSFC	COM1019	42 MIN 5 SEC	1 HR 48 MIN 20 SEC
	POP1	GSFC	SAAX0209	42 MIN 6 SEC	1 HR 48 MIN 29 SEC
	POP1	6SFC	SAAX0228	44 MIN 52 SEC	1 HR 47 MIN 50 SEC
	POP2	JPL	SAAX0212	2 HRS 47 MIN 20 SEC	7 HRS 7 MIN 37 SEC
3 SA		· · · · · · · · · · · · · · · · · · ·		CONFIG. 3	CONFIG. 3
LINKS	SOURCE	RDC	HISSION #	MEAN RESPONSE TIME	MAX RESPONSE TIME
100	SS	GSFC	CO <del>11</del> 1014	45 MIN 17 SEC	1 HR 50 MIN 5 SEC
MISSIONS	SS	GSFC	SAAX0207	2 MIN 28 SEC	20 MIN 14 SEC
	POP1	6SFC	COM11019	50 MIN 52 SEC	1 HR 52 MIN 33 SEC
	P0P1	6SFC	SAAX0209	50 MIN 51 SEC	1 HR 52 MIN 42 SEC
	POP1	GSFC	SAAX0228	52 MIN 30 SEC	
	POP2	JPL			
	I UF C	UTL	SAAX0212	3 HRS 4 MIN 5 SEC	7 HRS 28 MIN 24 SEC

Table F.5 DSDS Response Time Simulation Results

#### **Buffering Analysis Model**

## **BUFFERING ANALYSIS**

Figure F.12, shown below, presents the buffer load analysis for 3 missions:

- 1) 80 Kbps continuous
- 2) 5 Kbps for 45 minutes
- 3) 3 Mbps for 30 minutes

The SA link bandwidth, b, is 1.5 Mbps and the zone of "non-contact" is set for t = 0 to t = 20 minutes. Total simulation time is 98 minutes (approx. one orbit).

Tables F.6 and F.7 show peak buffer load and timing analyses for several sets of missions with varying bandwidths and zone of "non-contact" times. Maximum queue time is defined as the total simulation time (from t = 0.0) before the buffer load reaches zero bits stored.

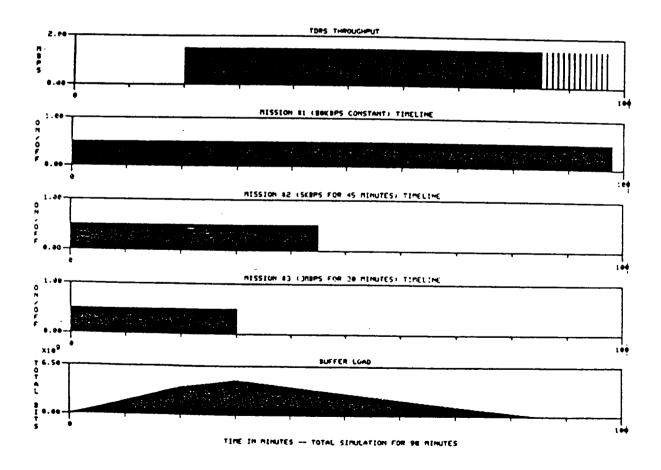


Figure F.12 Sample DSDS Buffer Load Analysis

# Polar Orbiting Platform

3 Missions:

1) 80 Kbps continuous

2) 5 Kbps for 45 minutes

3) 3 Mbps for 30 minutes

Simulation run time = 98 minutes

Zone of "non-contact" for n = 15, 20, 30, 45 minutes

Bandwidth, b = 1.5, 2., 3., 4., 5. Mbps

one of "non-contact" n	•	Ban	dwidth b		
15 minutes	1.5 Mbps	2 Mbps	3 Mbps	4 Mbps	5 Mbps
Max. Buffer Load = (Mbits)	4209	3759	2859	2781	2781
Max. Queue Time =	1.29 hrs	1.01 hrs	44.22 min	36.66 min	32.26 min
20 minutes	1.5 Mbps	2 Mbps	3 Mbps	4 Mbps	5 Mbps
Max. Buffer Load = (Mbits)	4659	4359	3759	3708	3708
Max. Queue Time =	1.38 hrs	1.10 hrs	49.35 min	41.78 min	37.34 min
30 minutes		2 Mbps	3 Mbps	4 Mbps	5 Mbps
Max. Buffer Load = (Mbits)		5559	5559	5559	5559
Max. Queue Time =		1.27 hrs	59.62 hrs	51.99 hrs	47.52 hrs
45 minutes			3 Mbps	4 Mbps	5 Mbps
Max. Buffer Load = (Mbits)			5634	5634	5634
Max. Queue Time =			1.24 hrs	1.12 hrs	1.05 hrs

Table F.6 Buffer Load Performance Results - Scenario 1

## Space Station 1994

2 Missions:

1) 1506 Kbps for 60 minutes

2) 191 Kbps continuous

Simulation run time = 98 minutes

Zone of "non-contact" for n = 10, 20, 30, 40 minutes

Bandwidth, b = 1.5, 2., 3., 4., 5. Mbps

Cone of "non-contact" n		8	Bandwidth b		
10 minutes	1.5 Mbps	2 Mbps	3 Mbps	4 Mbps	5 Mbps
Max. Buffer Load = (Mbits)	1610	1020	1020	1020	1020
	1.31 hrs	58.94 min	20.89 min	15.80 min	14.05 min
20 minutes	1.5 Mbps	2 Mbps	3 Mbps	4 Mbps	5 Mbps
Max. Buffer Load = (Mbits)	2510	2038	2038	2038	2038
Max. Queue Time =	1.50 hrs	1.17 hrs	43.91 min	33.18 min	29.19 min
30 minutes		2 Mbps	3 Mbps	4 Mbps	5 Mbps
Max. Buffer Load =		3056	3056	3056	3056
(Mbits) Max. Queue Time =		1.35 hrs	1.05 hrs	50.54 min	44.32 min
40 minutes		2 Mbps	3 Mbps	4 Mbps	5 Mbps
Max. Buffer Load =		4076	4076	4076	4076
(Mbits) Max. Queue Time =		1.54 hrs	1.23 hrs	1.08 hrs	59.46 min

Table F.7 Buffer Load Performance Results - Scenario 2

#### FDDI Token Ring

Performance results for the PAWS FDDI token ring simulation model are shown below. Figure F.13 represents the throughput and response time performance results for 5 active stations, generating all high priority messages. For this particular model, since all messages have top priority, message transmission is dependent only upon arrival of the token at a station - no token rotation time constraint is applied. However, only one message is transmitted for each token arrival, thus limiting each station's transmission time as well as the token rotation time around the ring to other stations. Input rates shown are mean values based on an exponential random process. The response time given is the time a message waits at the top of its source queue until it is transmitted onto the ring. The results show that for top priority, a higher throughput performance is reached with larger data fields, however, response times are also increased. Overall, the ring utilization is quite high.

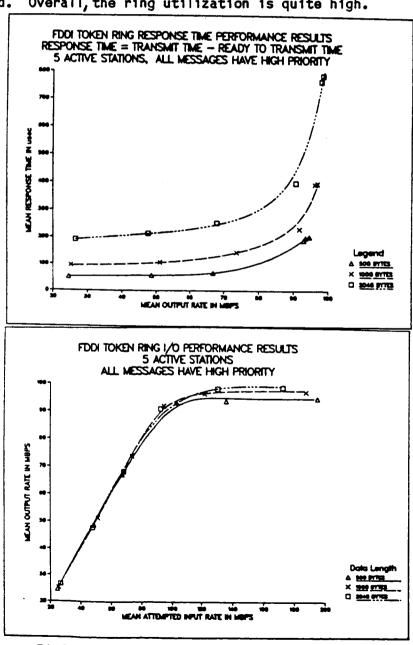


Figure F.13 PAWS FDDI Token Ring Model Performance Results - Scenario 1

Figure F.14 involves 5 active stations, all sending 3 priority levels of data with information field lengths of 1000 bytes. All priority 1 messages from one station are transmitted upon receipt of the token. Priority 2 and 3 message transmissions are dependent upon the token rotation time or the present data load. Service time is defined as a message's total queue time at a station before transmission. This shows that, for low ring traffic (under 100 Mbps total input rate), throughput and response performances are very desirable. However, as the total attempted input rate exceeds 150 Mbps, ring utilization is overtaken by all priority 1 messages.

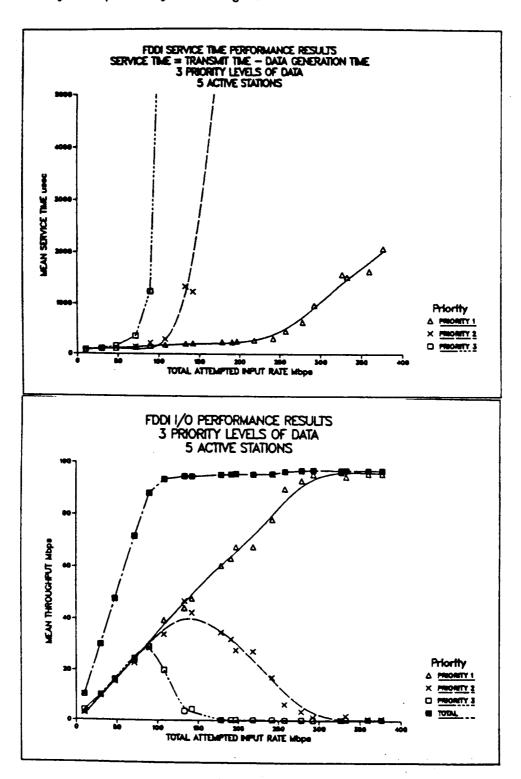


Figure F.14 PAWS FDDI Token Ring Model Performance Results - Scenario 2

Figure F.15 shows the performance results for the PAWS FODS simulation model. The model contained 5 active stations with poisson input rates and varying information lengths for messages. This shows that performance of the FODS and FDDI token ring configurations are relatively close. Again, larger data lengths receive higher throughput and response times.

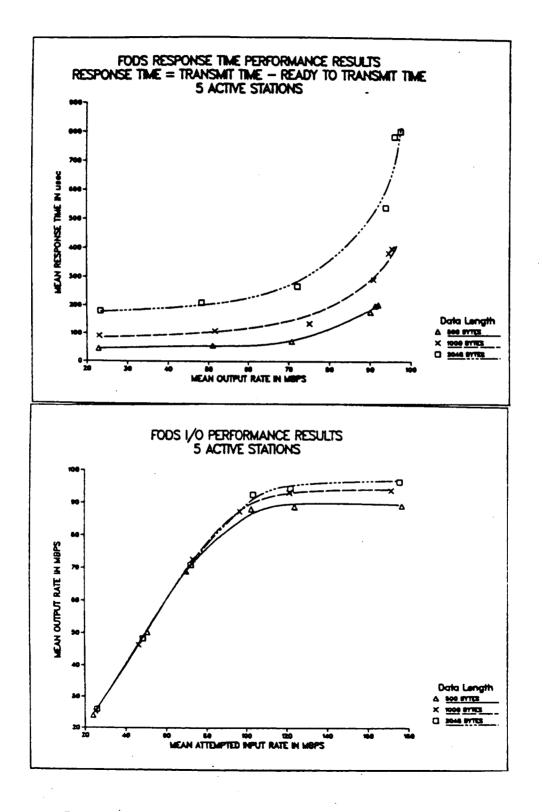


Figure F.15 PAWS FODS Model Performance Results

Token Ring

Calibration curves for the RESQ simulation model of the token ring are shown below in figure F.16. The two curves represent simulation and analytical results. The results show that ring utilization peaks at approximately 50% and transfer time is relatively low until 45% utilization where it has significant increase.

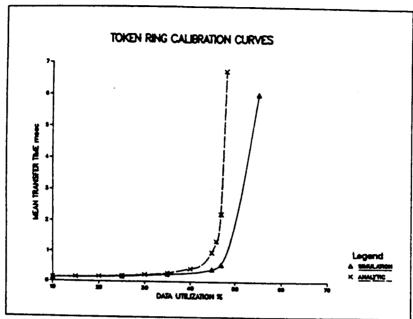


Figure F.16 RESQ Token Ring Simulation Results

Carrier Sense Multiple Access with Collision Detection (CSMA/CD)

Figure F.17, shown below, are simulation and analytical results for the RESQ CSMA/CD simulation model. The two calibration curves give a maximum utilization of only 20% and low transfer time up to approximately 18% utilization. Overall, this architecture shows poor performance.

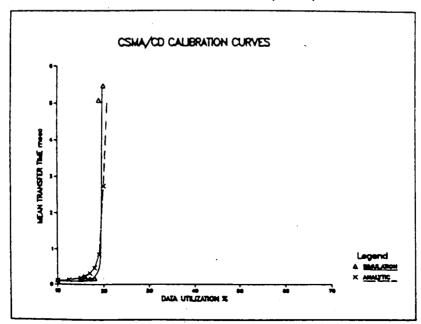


Figure F.17 RESQ CSMA/CD Simulation Results

# APPENDIX G

## FUNCTION DESIGN CHARACTERISTICS

# FUNCTIONAL REQUIREMENTS DATA BASE DESIGN CHARACTERISTICS FIELD DESCRIPTION

This list of definitions will help the reader understand the entries of the design characteristic section of the SSDS functional requirements data base.

ENTRY DESCRIPTION

Data Source Contains the documents that contributed to the

design characteristics of the function

Methodology Two lines indicating methods used to define the

design characteristics

Response Time Maximum acceptable delay (in msec) from input to

output including function execution time.

Command Level One or more characters indicating level hierarchy

A - Automatic - no operator activity required I - Interactive - some operator activity required

M - Manual - much operator activity required

N - Not Determined

Command Location One or more characters indicating command source

hierarchy

U - User site G - Ground

0 - Onboard
I - Internal to function

N - Not Determined

Data Quality Maximum bit error rate at final destination in

errors per 106 bits

Synchronization Up to two other functions not directly connected by

I/O which must be synchronized with this function

Dependency Single character showing dependency

U - User Remote Facility G - SSDS Ground Element S - SSDS Space Element

I - Independent of other locations

N - Not Determined

Physical Location Code

Indicate code as:

M - Multiple

H - Habitability module

P - Pressurized laboratory module

L - Logistics module

N - Multiple berthing module

R - Resource module

X - Exterior mounting

C - Constellation

F - Remote free-flier

G - Ground station

U - User site

S - Safe Haven

D - Don't care

T - TBD

Diagnostics Req'd

Single character indicating yes or no for diagnosis or self-check (presence of diagnostics implies that there is a data flow output to CORE STAT)

**Interval** 

Time between diagnostic cycles in sec

Instructions

Average number of instructions executed when this function is triggered in kilo instructions per cycle

Repetition Rate

Average rate that this function is executed (per time units specified below)

Repetition Units

Three character set giving repetition rate units /ms - per millisecond

/s - per second /mn - per minute /hr - per hour

/da - per day

Program Size

Size of program in Kbytes (resident in CPU)

Data Requirement

Processor storage in Kbytes (resident in CPU)

Secondary Storage

Storage amount in Kbytes (on line - on a hard

disk, for example)

Perishability %, Time

Indicates percent perishable in hours (what percent of the data in secondary storage becomes obsolete over time?; what is the average update interval?)

Archive Storage

Amount of offline storage in Kbytes

No. of Displays

Number of display formats which are used to monitor and control the function (one display format may be used to display many different

parameters)

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 1.1.1 NAME: ACQUIRE REALTIME DATA

DATA SOURCES:

**METHODOLOGY:** 

RESPONSE TIME: I/O DELAY ALLOWABLE: 2000.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: PHYSICAL LOCATION CODE:

DIAGNOSTICS/SELF TEST: REQUIRED: NUMBER: O INTERVAL: 0.00 SEC

IOC GROWTH

REQUIREMENTS:
DATA PROCESSING INSTRUCTIONS PER CYCLE: 10.00 KIPC 10.00/S 10.00 KIPC

PROCESSOR MEMORY: PROGRAM SIZE:

REPETITION RATE: 10.00 KIPC 10.00 KIPC REPETITION RATE: 10.00/S 10.00/S 10.00/S 10.00/S 10.00/S 10.00 KBYTES 20.00 KBYTES 20.00 KBYTES 60.00 KBYTES 60.00 KBYTES 60.00 KBYTES 20.00 KBYTES

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 1.1.1P NAME: ACQUIRE REALTIME DATA

DATA SOURCES:

METHODOLOGY:

2000.00 msec RESPONSE TIME: I/O DELAY ALLOWABLE:

LOCATION: **RATE:** 0.00 COMMAND/CONTROL: LEVEL: A

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: PHYSICAL LOCATION CODE:

DIAGNOSTICS/SELF TEST: REQUIRED: NUMBER: O INTERVAL: 0.00 SEC

IOC REQUIREMENTS: GROWTH 7.00 KIPC

DATA PROCESSING INSTRUCTIONS PER CYCLE: 7.00 KIPC 10.00 KIPC
REPETITION RATE: 10.00/S 10.00/S

PROCESSOR MEMORY: PROGRAM SIZE: 7.00 KBYTES 14.00 KBYTES
DATA REQUIREMENT: 21.00 KBYTES 42.00 KBYTES
DATA STORAGE: SECONDARY: 14.00 KBYTES 14.00 KBYTES
PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS
ARCHIVAL: 0.00 KBYTES 0.00 KBYTES

0.00 KBYTES 0.00 KBYTES

\* OF DISPLAYS: 0 0 20-JUL-1985

SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 1.1.2 NAME: PRIORITIZE REALTIME DATA

DATA SOURCES:

**METHODOLOGY:** 

RESPONSE TIME: I/O DELAY ALLOWABLE:

0.00 msec

COMMAND/CONTROL: LEVEL: A

LOCATION:

RATE:

0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE:

0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: PHYSICAL LOCATION CODE:

DIAGNOSTICS/SELF TEST: REQUIRED: NUMBER: 0 INTERVAL:

0.00 SEC

REQUIREMENTS: DATA PROCESSING INSTRUCTIONS PER CYCLE: IOC 1.00 KIPC

GROWTH 1.00 KIPC

REPETITION RATE:

10.00/S 4.00 KBYTES

10.00/8 8.00 KBYTES

PROCESSOR MEMORY: PROGRAM SIZE: DATA REQUIREMENT: DATA STORAGE: SECONDARY:

2.00 KEYTES 8.00 KEYTES

4.00 KBYTES 8.00 KBYTES

PERISHABILITY:

0.00 KEYTES

0.00% IN 0.00HRS 0.00% IN 0.00HRS

ARCHIVAL: \* OF DISPLAYS:

0.00 KBYTES

0 0

20-JUL-1985

SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 1.1.2P NAME: PRIORITIZE REALTIME DATA

DATA SOURCES:

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE:

0.00 msec

RATE:

COMMAND/CONTROL: LEVEL: A

LOCATION:

DATA QUALITY: MAXIMUM BIT ERROR RATE:

0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: PHYSICAL LOCATION CODE:

DIAGNOSTICS/SELF TEST: REQUIRED: NUMBER: O INTERVAL:

0.00 SEC

0.00

GROWTH

REQUIREMENTS: DATA PROCESSING INSTRUCTIONS PER CYCLE:

IOC 0.70 KIPC

1.00 KIPC

REPETITION RATE: PROCESSOR MEMORY: PROGRAM SIZE:

10.00/S 2.80 KBYTES 10.00/S 5.60 KBYTES

DATA REQUIREMENT: DATA STORAGE: SECONDARY: PERISHABILITY:

1.40 KBYTES 5.60 KBYTES 0.00% IN 0.00HRS 0.00% IN 0.00HRS

2.80 KBYTES 8.00 KBYTES

ARCHIVAL:

0.00 KEYTES 0.00 KEYTES 0

\* OF DISPLAYS:

0

20-JUL-1985

SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 1.1.3 NAME: MONITOR REALTIME DATA

DATA SOURCES:

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE:

0.00 msec

COMMAND/CONTROL: LEVEL: A

LOCATION:

RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: PHYSICAL LOGATION CODE:

DIAGNOSTICS/SELF TEST: REQUIRED: NUMBER: 0 INTERVAL:

0.00 SEC

REQUIREMENTS: DATA PROCESSING INSTRUCTIONS PER CYCLE:

IOC 2.00 KIPC 10.00/S

GROWTH 2.00 KIPC

REPETITION RATE: PROCESSOR MEMORY: PROGRAM SIZE:
DATA REQUIREMENT:

5.00 KBYTES 2.00 KBYTES 2.00 KBYTES 10.00 KBYTES

10.00 KBYTES 4.00 KBYTES

DATA STORAGE: SECONDARY: PERISHABILITY: ARCHIVAL:

0.00% IN 0.00HRS 0.00% IN 0.00HRS 0.00 KBYTES

10.00 KEYTES 0.00 KEYTES

10.00/S

\* OF DISPLAYS: 0

0

20-JUL-1985

SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 1.1.3P NAME: MONITOR REALTIME DATA

DATA SOURCES:

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE:

0.00 msec

RATE: 0.00

COMMAND/CONTROL: LEVEL: A

LOCATION:

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE:

PHYSICAL LOCATION CODE:

DIAGNOSTICS/SELF TEST: REQUIRED:

NUMBER: O INTERVAL:

0.00 SEC

REQUIREMENTS:

GROWTH

DATA PROCESSING INSTRUCTIONS PER CYCLE: REPETITION RATE:
PROCESSOR MEMORY: PROGRAM SIZE:

IOC 1.40 KIPC 10.00/S

2.00 KIPC 10.00/S

DATA REQUIREMENT: DATA STORAGE: SECONDARY: PERISHABILITY: ARCHIVAL:

3.50 KBYTES 5.00 KBYTES 1.40 KBYTES 3.00 KBYTES 6.00 KBYTES 10.00 KBYTES 0.00% IN 0.00HRS 0.00% IN 0.00HRS

\* OF DISPLAYS:

0.00 KEYTES 0.00 KEYTES

SSDS FUNCTIONAL DATA SHEET 20-JUL-1985

FUNCTION NO: 1.1.4 NAME: DISPATCH REALTIME DATA

DATA SOURCES:

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE: 0.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: PHYSICAL LOCATION CODE:

DIAGNOSTICS/SELF TEST: REQUIRED: NUMBER: 0 INTERVAL: 0.00 SEC

REQUIREMENTS: IOC
DATA PROCESSING INSTRUCTIONS PER CYCLE: 5.00 KIPC
REPETITION RATE: 10.00/S GROWTH

5.00 10.00/S 5.00 KIPC

PROCESSOR MEMORY: PROGRAM SIZE:

10.00 KBYTES 20.00 KBYTES
5.00 KBYTES 10.00 KBYTES
20.00 KBYTES 20.00 KBYTES
0.00% IN 0.00HRS 0.00% IN 0.00HRS
0.00 KBYTES 0.00 KBYTES DATA REQUIREMENT:
DATA STORAGE: SECONDARY:
PERISHABILITY:
ARCHIVAL:
OF DISPLAYS:

0 ٥

SSDS FUNCTIONAL DATA SHEET 20-JUL-1985

FUNCTION NO: 1.1.4P NAME: DISPATCH REALTIME DATA

DATA SOURCES:

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE: 0.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

PHYSICAL LOCATION CODE: SYSTEM DEPENDENCY CODE:

DIAGNOSTICS/SELF TEST: REQUIRED: NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC
DATA PROCESSING INSTRUCTIONS PER CYCLE: 3.50 FIPC
REPETITION RATE: 10.00/S GROWTH 5.00 KIPC

REPETITION RATE:
PROCESSOR MEMORY: PROGRAM SIZE:
DATA REQUIREMENT: 10.00/S

7.00 KBYTES 14.00 KBYTES 3.50 KBYTES 7.00 KBYTES 14.00 KBYTES 20.00 KBYTES 14.00 KBYTES 20.00 KBYTES 0.00% IN 0.00HRS 0.00% IN 0.00HRS DATA STORAGE: SECONDARY:

PERISHABILITY:
ARCHIVAL:
OF DISPLAYS: 0.00 KEYTES 0.00 KEYTES

0

20-JUL-1985

SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 1.1.5 NAME: FORMAT REALTIME DATA

DATA SOURCES:

**METHODOLOGY:** 

RESPONSE TIME: I/O DELAY ALLOWABLE:

0.00 msec

COMMAND/CONTROL: LEVEL: A

LOCATION: RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE:

PHYSICAL LOCATION CODE:

DIAGNOSTICS/SELF TEST: REQUIRED:

NUMBER: O INTERVAL:

0.00 SEC

REQUIREMENTS: IOC GROWTH

DATA PROCESSING INSTRUCTIONS PER CYCLE: 8.00 KIPC
REPETITION RATE: 10.00/S 10.00/S

PROCESSOR MEMORY: PROGRAM SIZE: 20.00 KEYTES 40.00 KEYTES

DATA REQUIREMENT: 10.00 KEYTES 20.00 KEYTES

DATA STORAGE: SECONDARY: 40.00 KEYTES 40.00 KEYTES

PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

APOCHIVAL: 0.00% KEYTES 0.00% KEYTES

PERISHABILITY:
ARCHIVAL:
OF DISPLAYS: \* OF DISPLAYS:

0.00 KEYTES 0.00 KEYTES

0

20-JUL-1985

SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 1.1.5P NAME: FORMAT REALTIME DATA

DATA SOURCES:

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE:

0.00 msec

COMMAND/CONTROL: LEVEL: A

LOCATION:

RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE:

PHYSICAL LOCATION CODE:

DIAGNOSTICS/SELF TEST: REQUIRED:

NUMBER: O INTERVAL:

0.00 SEC

REQUIREMENTS: IOC GROWTH

DATA PROCESSING INSTRUCTIONS PER CICLE: 5.60 KIPC 8.00 KIPC

REPETITION RATE: 10.00/S 10.00/S

PROCESSOR MEMORY: PROGRAM SIZE: 14.00 KBYTES 28.00 KBYTES

DATA REQUIREMENT: 7.00 KBYTES 14.00 KBYTES

DATA STORAGE: SECONDARY: 28.00 KBYTES 34.00 KBYTES

PERISHABILITY: ARCHIVAL:

0.00% IN 0.00HRS 0.00% IN 0.00HRS . 0.00 KBYTES . 0.00 KBYTES

\* OF DISPLAYS:

0

0

SSDS FUNCTIONAL DATA SHEET 20-JUL-1985

FUNCTION NO: 1.2.1 NAME: ACQUIRED DELAYED PAYLOAD DATA

DATA SOURCES:

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE: 0.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: PHYSICAL LOCATION CODE:

DIAGNOSTICS/SELF TEST: REQUIRED: NUMBER: 0 INTERVAL: 0.00 SEC

REQUIREMENTS: IOC
DATA PROCESSING INSTRUCTIONS PER CYCLE: 50.00 KIPC GROWTH

50.00 KIPC REPETITION RATE: 1.00/8 1.00/S

PROCESSOR MEMORY: PROGRAM SIZE:

10.00 KBYTES 20.00 KBYTES 200.00 KBYTES 400.00 KBYTES 4000000.00 KBYTES 8000000.00 KBYTES 0.00% IN 0.00HRS 0.00% IN 0.00HRS

DATA REQUIREMENT:
DATA STORAGE: SECONDARY:
PERISHABILITY:
ARCHIVAL: 0.00 KBYTES 0.00 KBYTES # OF DISPLAYS: 0 0

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 1.2.1P NAME: ACQUIRED DELAYED PAYLOAD DATA

DATA SOURCES:

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE: 0.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: PHYSICAL LOCATION CODE:

DIAGNOSTICS/SELF TEST: REQUIRED: NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE:

REPETITION RATE:

PROCESSOR MEMORY: PROGRAM SIZE:
DATA REQUIREMENT:
DATA STORAGE: SECONDARY:
PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

ARCHIVAL: 0.00 KBYTES 0.00 KEYTES # OF DISPLAYS: 0 0

20-JUL-1985

SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 1.2.2 NAME: PRIORITIZE DELAYED DATA

DATA SOURCES:

**METHODOLOGY:** 

RESPONSE TIME: I/O DELAY ALLOWABLE:

0.00 msec

COMMAND/CONTROL: LEVEL: A

LOCATION:

RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE:

PHYSICAL LOCATION CODE:

DIAGNOSTICS/SELF TEST: REQUIRED:

NUMBER: O INTERVAL:

0.00 SEC

REQUIREMENTS:

IOC 1.00 KIPC

DATA PROCESSING INSTRUCTIONS PER CYCLE:

GROWTH 1.00 KIPC

REPETITION RATE:

1.00/S

1.00/S

PROCESSOR MEMORY: PROGRAM SIZE:

4.00 KBYTES 8.00 KBYTES
2.00 KBYTES 4.00 KBYTES
8.00 KBYTES 8.00 KBYTES
0.00% IN 0.00HRS 0.00% IN 0.00HRS
0.00 KBYTES 0.00 KBYTES

DATA REQUIREMENT: DATA STORAGE: SECONDARY:
PERISHABILITY:
ARCHIVAL:
OF DISPLAYS:

0 0

20-JUL-1985

SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 1.2.2P NAME: PRIORITIZE DELAYED DATA

DATA SOURCES:

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE:

0.00 msec

COMMAND/CONTROL: LEVEL: A

LOCATION:

RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE:

0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE:

PHYSICAL LOCATION CODE:

DIAGNOSTICS/SELF TEST: REQUIRED: NUMBER: 0 INTERVAL:

0.00 SEC

. REQUIREMENTS: IOC
DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.70 KIPC
REPETITION RATE: 1.00/S

GROWTH 1.00 KIPC

REPETITION RATE: PROCESSOR MEMORY: PROGRAM SIZE:

2.80 KBYTES 1.40 KBYTES

1.00/S 5.60 KBYTES

DATA REQUIREMENT: DATA STORAGE: SECONDARY:

5.60 KBYTES

0.00% IN 0.00HRS 0.00% IN 0.00HRS

2.80 KBYTES 8.00 KBYTES

PERISHABILITY: ARCHIVAL: \* OF DISPLAYS:

٥

0.00 KBYTES 0.00 KBYTES 0

FUNCTION NO: 1.2.3 NAME: MONITOR DELAYED DATA

DATA SOURCES:

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE: 0.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: **RATE:** 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

PHYSICAL LOCATION CODE: SYSTEM DEPENDENCY CODE:

DIAGNOSTICS/SELF TEST: REQUIRED: NUMBER: 0 INTERVAL: 0.00 SEC

IOC REQUIREMENTS: GROWTH 2.00 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 2.00 KIPC REPETITION RATE: 1.00/S 1.00/S

5.00 KEYTES 2.00 KEYTES PROCESSOR MEMORY: PROGRAM SIZE: 10.00 KBYTES

DATA REQUIREMENT: 4.00 KBYTES 10.00 KBYTES 10.00 KEYTES

DATA STORAGE: SECONDARY:
PERISHABILITY:
ARCHIVAL:
OF DISPLAYS: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

0.00 KBYTES 0.00 KBYTES Λ 0

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 1.2.3P NAME: MONITOR DELAYED DATA

DATA SOURCES:

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE: 0.00 msec

LOCATION: RATE: 0.00 COMMAND/CONTROL: LEVEL: A

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

PHYSICAL LOCATION CODE: SYSTEM DEPENDENCY CODE:

DWAGNOSTICS/SELF TEST: REQUIRED: NUMBER: 0 INTERVAL: 0.00 SEC

IOC REQUIREMENTS: GROWTH 1.40 KIPC 0.70/S DATA PROCESSING INSTRUCTIONS PER CYCLE: 2.00 KIPC

1.00/S REPETITION RATE: 3.50 KBYTES 7.00 KBYTES PROCESSOR MEMORY: PROGRAM SIZE: 1.40 KBYTES 7.00 KBYTES 2.80 KBYTES

DATA REQUIREMENT: DATA STORAGE: SECONDARY: 7.00 KBYTES 14.00 KBYTES

PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS ARCHIVAL: 0.00 KBYTES 0.00 KBYTES \* OF DISPLAYS: 0 0

SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 1.2.4 NAME: DISPATCH DELAYED DATA

DATA SOURCES:

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE:

0.00 msec

COMMAND/CONTROL: LEVEL: A

LOCATION:

RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE:

PHYSICAL LOCATION CODE:

DIAGNOSTICS/SELF TEST: REQUIRED:

NUMBER: O INTERVAL:

0.00 SEC

GROWTH

REQUIREMENTS: IOC DATA PROCESSING INSTRUCTIONS PER CYCLE: 5.00 KIPC

5.00 KIPC

REPETITION RATE:

10.00/8

10.00/8

PROCESSOR MEMORY: PROGRAM SIZE:

10.00 KBYTES

20.00 KBYTES

DATA REQUIREMENT: DATA STORAGE: SECONDARY:
PERISHABILITY:
ARCHIVAL:
OF DISPLAYS: 200.00 KEYTES 20.00 KEYTES

400.00 KBYTES 20.00 KBYTES

0.00% IN 0.00HRS 0.00% IN 0.00HRS

0.00 KBYTES

0.00 KBYTES

0 Ω

20-JUL-1985

SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 1.2.4P NAME: DISPATCH DELAYED DATA

DATA SOURCES:

**METHODOLOGY:** 

RESPONSE TIME: I/O DELAY ALLOWABLE:

0.00 msec

COMMAND/CONTROL: LEVEL: A

LOCATION:

RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE:

0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: PHYSICAL LOCATION CODE:

DIAGNOSTICS/SELF TEST: REQUIRED: NUMBER: O INTERVAL:

0.00 SEC

REQUIREMENTS: IOC GROWTH

DATA PROCESSING INSTRUCTIONS PER CYCLE: 3.50 KIPC 5.00 KIPC

REPETITION RATE: 7.00/S 10.00/S

PROCESSOR MEMORY: PROGRAM SIZE: 7.00 KBYTES 14.00 KBYTES

DATA REQUIREMENT: 140.00 KBYTES 280.00 KBYTES

DATA REQUIREMENT: 14.00 KBYTES 28.00 KBYTES

14.00 KBYTES 28.00 KBYTES

DATA STORAGE: SECONDARY:
PERISHABILITY:
ARCHIVAL:

\* OF DISPLAYS:

0.00 KBYTES

0.00% IN 0.00HRS 0.00% IN 0.00HRS 0.00 KBYTES

0

0

SSDS FUNCTIONAL DATA SHEET 20-JUL-1985

FUNCTION NO: 1.2.5 NAME: FORMAT DELAYED DATA

DATA SOURCES:

**METHODOLOGY:** 

RESPONSE TIME: I/O DELAY ALLOWABLE: 0.00 msec

RATE: 0.00 COMMAND/CONTROL: LEVEL: A LOCATION:

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: PHYSICAL LOCATION CODE:

0.00 SEC DIAGNOSTICS/SELF TEST: REQUIRED: NUMBER: O INTERVAL:

IOC GROWTH REQUIREMENTS: 5.00 KIPC 1.00/S DATA PROCESSING INSTRUCTIONS PER CYCLE: 5.00 KIPC

REPETITION RATE: 1.00/S PROCESSOR MEMORY: PROGRAM SIZE:

20.00 KBYTES 40.00 KBYTES DATA REQUIREMENT: 10.00 KEYTES 40.00 KEYTES 20.00 KBYTES

40.00 KEYTES 40.00 AD.... 0.00% IN 0.00HRS 0.00% IN 0.00HRS 0.00 KEYTES 0.00 KEYTES DATA STORAGE: SECONDARY:
PERISHABILITY:
ARCHIVAL:

\* OF DISPLAYS: 0 0

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 1.2.5P NAME: FORMAT DELAYED DATA

DATA SOURCES:

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE: 0.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

PHYSICAL LOCATION CODE: SYSTEM DEPENDENCY CODE:

DIAGNOSTICS/SELF TEST: REQUIRED: NUMBER: 0 INTERVAL: 0.00 SEC

IOC 3.50 KIPC 1.00/S REQUIREMENTS: GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 5.00 KIPC REPETITION RATE:

1.00/S 14.00 KBYTES PROCESSOR MEMORY: PROGRAM SIZE: 28.00 KBYTES DATA REQUIREMENT: 7.00 KEYTES 28.00 KEYTES 14.00 KBYTES

DATA STORAGE: SECONDARY: JE: SECOND...
PERISHABILITY: 40.00 KBYTES 0.00% IN 0.00HRS 0.00% IN 0.00HRS O.OO KEYTES 0.00 KBYTES

\* OF DISPLAYS: 0 0

FUNCTION NO: 1.3.1 NAME: PRE-PROCESSING

DATA SOURCES: WOODS HOLE DATABASE, EXPERIENCE

METHODOLOGY: ENGINEERING ANALYSIS BASED ON WOODS HOLE DATABASE.

RESPONSE TIME: I/O DELAY ALLOWABLE: 200.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: G RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH: NONE

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: G

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 1 INTERVAL: 1.00 SEC

REQUIREMENTS: IOC GROWTH 2.00 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 3.00 KIPC REPETITION RATE: 33.00/MS 33.00/MS PROCESSOR MEMORY: PROGRAM SIZE: 8.00 KBYTES 8.00 KBYTES DATA REQUIREMENT: 0.00 KEYTES 0.00 KBYTES DATA STORAGE: SECONDARY: 0.00 KBYTES 0.00 KBYTES 0.00% IN 0.00HRS 0.00% IN 0.00HRS 0.00 KEYTES PERISHABILITY:

ARCHIVAL: \* OF DISPLAYS: 10 10

FUNCTION NO: 1.3.2 NAME: DATA CAPTURE

DATA SOURCES: WOODS HOLE DATABASE

METHODOLOGY: AN ENGINEERING ANALYSIS BASED ON WOODS HOLE DATA BASE.

RESPONSE TIME: I/O DELAY ALLOWABLE: 200.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: G RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: G

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 1 INTERVAL: 1.00 SEC

REQUIREMENTS: IOC GROWTH 1.00 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 1.00 KIPC REPETITION RATE: 34.00/MS 34.00/MS PROCESSOR MEMORY: PROGRAM SIZE: 4.00 KEYTES 0.00 KEYTES 4.00 KBYTES 0.00 KBYTES DATA REQUIREMENT: 10000.00 KBYTES DATA STORAGE: SECONDARY: 10000.00 KBYTES PERISHABILITY: 20.00% IN 1.00HRS 20.00% IN 1.00HRS

PERISHABILITY: 20.00% IN 1.00HRS 20.00% IN 1.00HRS
ARCHIVAL: 0.00 KBYTES 0.00 KBYTES

\* OF DISPLAYS: 10 10

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FUNCTION NO: 1.3.3 NAME: ROUTING AND TRANSMISSION

DATA SOURCES: WOODS HOLE DATABASE

METHODOLOGY: ENGINEERING ANALYSIS BASED ON WOODS HOLE DATA BASE.

200

RESPONSE TIME: I/O DELAY ALLOWABLE: 200.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: G RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: G

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 1 INTERVAL: 1.00 SEC

REQUIREMENTS: IOC GROWTH
DATA PROCESSING INSTRUCTIONS PER CYCLE: 20.00 KIPC 30.00 KIPC
REPETITION RATE: 25.00/MS 23.00/MS
PROCESSOR MEMORY: PROGRAM SIZE: 60.00 KEYTES 90.00 KEYTES

DATA REQUIREMENT: 10000.00 KBYTES 12000.00 KBYTES
DATA STORAGE: SECONDARY: 10000.00 KBYTES 15000.00 KBYTES

PERISHABILITY: 10.00% IN 1.00HRS 10.00% IN 1.00HRS
ARCHIVAL: 0.00 KEYTES 0.00 KEYTES

\* OF DISPLAYS: 10 12

FUNCTION NO: 1.3.4 NAME: QUALITY VERIFICATION

DATA SOURCES: WOODS HOLE DATABASE

METHODOLOGY: ENGINEERING ANALYSIS IS BASED ON WOODS HOLE DATABASE.

RESPONSE TIME: I/O DELAY ALLOWABLE: 200.00 msec

LOCATION: G COMMAND/CONTROL: LEVEL: A RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.10 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: G

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 1.00 SEC 1 INTERVAL:

REQUIREMENTS: IOC · GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.10 KIPC 0.10 KIPC REPETITION RATE: 34.00/MS 34.00/MS 1.00 KEYTES 0.00 KEYTES 1.00 KEYTES 0.00 KEYTES PROCESSOR MEMORY: PROGRAM SIZE: DATA REQUIREMENT: DATA STORAGE: SECONDARY: 0.00 KBYTES 0.00 KEYTES PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

ARCHIVAL: 0.00 KEYTES 0.00 KBYTES \* OF DISPLAYS: 10 10

FUNCTION NO: 1.4.1 NAME: CUSTOMER DATA INTERFACE MGT

DATA SOURCES: WOODS HOLE DATABASE

METHODOLOGY: ENGINEERING ANALYSIS BASED ON WOODS HOLE

DATABASE

RESPONSE TIME: I/O DELAY ALLOWABLE: 50000.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: U.G RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.10 E -6

SYNCHRONIZATION WITH: 1.4.5

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: G

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 1 INTERVAL: 5.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 2.00 KIPC 2.00 KIPC REPETITION RATE: 11.00/MS 11.00/MS PROCESSOR MEMORY: PROGRAM SIZE: 6.00 KBYTES 6.00 KBYTES 0.00 KBYTES DATA REQUIREMENT: 0.00 KBYTES DATA STORAGE: SECONDARY: 5000.00 KBYTES 10000.00 KBYTES

PERISHABILITY: 20.00% IN 1.00HRS 20.00% IN 1.00HRS ARCHIVAL: 0.00 KEYTES 0.00 KEYTES

OF DISPLATS: 20 20

FUNCTION NO: 1.4.2 NAME: CUSTOMER DATA CAPTURE

DATA SOURCES: WOODS HOLE DATABASE

METHODOLOGY: ENGINEERING ANALYSIS BASED ON WOODS HOLE DATABASE

RESPONSE TIME: I/O DELAY ALLOWABLE: 5000.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: U.G RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.10 E -6

SYNCHRONIZATION WITH: 1.4.5 1.4.7

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: G

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 1 INTERVAL: 5.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 5.00 KIPC 5.00 KIPC REPETITION RATE: 11.00/MS 11.00/MS 15.00 KBYTES 0.00 KBYTES PROCESSOR MEMORY: PROGRAM SIZE: 15.00 KBYTES DATA REQUIREMENT: 0.00 KBYTES DATA STORAGE: SECONDARY: 0.00 KEYTES 0.00 KBYTES

PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS
ARCHIVAL: 0.00 KEYTES 0.00 KEYTES

+ OF DISPLAYS: 5

SSDS FUNCTIONAL DATA SHEET 20-JUL-1985

FUNCTION NO: 1.4.3 NAME: CUSTOMER DATA HANDLING

DATA SOURCES: WOODS HOLE DATABASE

METHODOLOGY: ENGINEERING ANALYSIS BASED ON WOODS HOLE DATABASE

RESPONSE TIME: I/O DELAY ALLOWABLE: 5000.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: U.G RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.10 E -6

SYNCHRONIZATION WITH: 1.4.1

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: G

DIAGNOSTICS/SELF TEST: REQUIRED: Y 1 INTERVAL: NUMBER: 5.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 1.00 KIPC 2.00 KIPC REPETITION RATE: 11.00/MS 11.00/MS PROCESSOR MEMORY: PROGRAM SIZE: 3.00 KEYTES 100.00 KEYTES 6.00 KBYTES 200.00 KBYTES DATA REQUIREMENT: DATA STORAGE: SECONDARY: 0.00 KEYTES 0.00 KBYTES

PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN O.OOHRS ARCHIVAL: 0.00 KEYTES 0.00 KBYTES \* OF DISPLAYS: 35 40

FUNCTION NO: 1.4.4 NAME: ANCILLARY DATA ACQUISITION

DATA SOURCES:

METHODOLOGY: ENGINEERING ANALYSIS BASED ON ASSUMED CUSTOMER

RESPONSE

RESPONSE TIME: I/O DELAY ALLOWABLE: 1800000.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: U.G RATE: 256.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.10 E -6

SYNCHRONIZATION WITH:

PHYSICAL LOCATION CODE: G SYSTEM DEPENDENCY CODE: G

1 INTERVAL: 21600.00 SEC DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER:

GROWTH REQUIREMENTS: IOC 1.00 KIPC 1.00 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 31.00/S REPETITION RATE: 31.00/S PROCESSOR MEMORY: PROGRAM SIZE: 3.00 KBYTES 3.00 KBYTES 0.00 KBYTES DATA REQUIREMENT: 0.00 KBYTES DATA STORAGE: SECONDARY: 0.00 KBYTES 0.00 KBYTES 0.00% IN 0.00HRS 0.00% IN 0.00HRS PERISHABILITY:

0.00 KBYTES 0.00 KEYTES ARCHIVAL: + OF DISPLAYS: 5 5

FUNCTION NO: 1.4.5 NAME: LEVEL 0 PROCESSING

DATA SOURCES: WOODS HOLE DATABASE

METHODOLOGY: ENGINEERING ANALYSIS BASED ON WOODS HOLE DATABASE

RESPONSE TIME: I/O DELAY ALLOWABLE: 5000.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: U,G RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.10 E -6

SYNCHRONIZATION WITH: 1.4.1 1.4.2

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: G

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 1 INTERVAL: 5.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 50.00 KIPC 50.00 KIPC REPETITION RATE: 1.00/MS 1.00/MS PROCESSOR MEMORY: PROGRAM SIZE: 150.00 KBYTES 150.00 KBYTES 100.00 KBYTES 100.00 KBYTES DATA REQUIREMENT: DATA STORAGE: SECONDARY: 0.00 KBYTES 0.00 KEYTES PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

ARCHIVAL: 0.00 KBYTES 0.00 KBYTES

 **OF DISPLAYS:** 20 20

FUNCTION NO: 1.4.6 NAME: CUSTOMER DATA ACCOUNTING

METHODOLOGY: ENGINEERING ANALYSIS BASED ON ASSUMED CUSTOMER RESP

RESPONSE TIME: I/O DELAY ALLOWABLE: 1800000.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: U,G RATE: 2.40

DATA QUALITY: MAXIMUM BIT ERROR RATE: 100.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: G

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 1 INTERVAL: 86400.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 1.00 KIPC 1.00 KIPC REPETITION RATE: 7.00/S 7.00/S PROCESSOR MEMORY: PROGRAM SIZE: 3.00 KBYTES 3.00 KBYTES DATA REQUIREMENT: 0.00 KBYTES 0.00 KEYTES DATA STORAGE: SECONDARY: 0.00 KBYTES 0.00 KBYTES PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

0.00 KBYTES ARCHIVAL: 0.00 KBYTES + OF DISPLAYS: 10 12

FUNCTION NO: 1.4.7 NAME: ROUTING AND TRANSMISSION

DATA SOURCES: WOODS HOLE DATABASE

METHODOLOGY: ENGINEERING ANALYSIS BASED ON WOODS HOLE DATABASE

RESPONSE TIME: I/O DELAY ALLOWABLE: 5000.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: U,G RATE: 90000.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.10 E -6

SYNCHRONIZATION WITH: 1.4.1 1.4.2

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: G

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 1 INTERVAL: 5.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 20.00 KIPC 10.00 KIPC REPETITION RATE: 11.00/MS 11.00/MS PROCESSOR MEMORY: PROGRAM SIZE: 50.00 KBYTES 60.00 KBYTES DATA REQUIREMENT: 100.00 KEYTES 200.00 KBYTES DATA STORAGE: SECONDARY: 0.00 KBYTES 0.00 KBYTES

PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS
ARCHIVAL: 0.00 KEYTES 0.00 KEYTES

OF DISPLAYS: 20 25

SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 1.5.1 NAME: CORE DATA INTERFACE MANAGEMENT

DATA SOURCES:

METHODOLOGY: CORE DATA TRAFFIC ANALYSIS. ASSUME AVG. WORST CASE OF 256 KBPS

TLM IN 1 KBYTE PACKETS.

RESPONSE TIME: I/O DELAY ALLOWABLE:

200.00 msec

COMMAND/CONTROL: LEVEL:

LOCATION:

RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE:

0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: G

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 1 INTERVAL: 1.00 SEC

IOC REQUIREMENTS: GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.50 KIPC 0.75 KIPC REPETITION RATE: **31.00/S** 31.00/S PROCESSOR MEMORY: PROGRAM SIZE: 6.00 KEYTES 9.00 KEYTES DATA REQUIREMENTS
DATA STORAGE: SECONDARY:
PERISHABILITY: 12.00 KBYTES DATA REQUIREMENT: 18.00 KBYTES

0.00 KBYTES 0.00 KBYTES 0.00% IN 0.00HRS 0.00% IN 0.00HRS 0.00 KBYTES ARCHIVAL: 0.00 KBYTES \* OF DISPLAYS: 1 2

20-JUL-1985

SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 1.5.1P NAME: CORE DATA INTERFACE MANAGEMENT

DATA SOURCES:

METHODOLOGY: CORE DATA TRAFFIC ANALYSIS. ASSUME AVG. WORST CASE OF 64 KBPS

TLM IN 1 KBYTE PACKETS.

RESPONSE TIME: I/O DELAY ALLOWABLE:

200.00 msec

COMMAND/CONTROL: LEVEL:

LOCATION:

RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE:

0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: G

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 1 INTERVAL: 1.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.50 KIPC 0.75 KIPC

REPETITION RATE: 8.00/S 8.00/S PROCESSOR MEMORY: PROGRAM SIZE: 6.00 KEYTES 9.00 KBYTES

DATA REQUIREMENT: DATA RECOMMENT:
DATA STORAGE: SECONDARY:
PERISHABILITY: 12.00 KBYTES 18.00 KBYTES 0.00 KBYTES 0.00 KBYTES

0.00% IN 0.00HRS 0.00% IN 0.00HRS ARCHIVAL: 0.00 KBYTES 0.00 KBYTES

# OF DISPLAYS: 1 2

SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 1.5.2 NAME: CORE DATA CAPTURE

DATA SOURCES:

METHODOLOGY: CORE DATA TRAFFIC ANALYSIS. ASSUME WORST CASE OF 256 KBPS TLM

IN 1KBYTE PACKETS.

RESPONSE TIME: I/O DELAY ALLOWABLE:

600.00 msec

COMMAND/CONTROL: LEVEL:

LOCATION:

RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE:

0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: G

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 1 INTERVAL: 1.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 4.00 KIPC 6.00 KIPC REPETITION RATE: 31.00/S 31.00/S

PROCESSOR MEMORY: PROGRAM SIZE: 20.00 KBYTES 30.00 KBYTES DATA REQUIREMENT: 48.00 KBYTES

32.00 KEYTES 2400000.00 KEYTES DATA STORAGE: SECONDARY: 2400000.00 KBYTES PERISHABILITY: 0.00% IN 4.00HRS 0.00% IN 4.00HRS

ARCHIVAL: 0.00 KBYTES 0.00 KEYTES \* OF DISPLAYS:

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 1.5.2P NAME: CORE DATA CAPTURE

DATA SOURCES:

METHODOLOGY: CORE DATA TRAFFIC ANALYSIS. ASSUME WORST CASE OF 64 KBPS TLM

IN 1KEYTE PACKETS.

RESPONSE TIME: I/O DELAY ALLOWABLE: 600.00 msec

RATE: COMMAND/CONTROL: LEVEL: LOCATION: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: G

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 1 INTERVAL: 1.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 4.00 KIPC : 6.00 KIPC

REPETITION RATE: 8.00/5 8.00/S PROCESSOR MEMORY: PROGRAM SIZE: 30.00 KBYTES 20.00 KBYTES

DATA REQUIREMENT: 32.00 KBYTES 600000.00 KBYTES 48.00 KBYTES DATA STORAGE: SECONDARY: 600000.00 KBYTES

4.00HRS PERISHABILITY: 0.00% IN 4.00HRS 0.00% IN ARCHIVAL: 0.00 KBYTES 0.00 KBYTES

\* OF DISPLAYS: 1

FUNCTION NO: 1.5.3 NAME: DATA EXTRACTION

DATA SOURCES:

METHODOLOGY: CORE DATA TRAFFIC ANALYSIS. ASSUME WORST CASE OF 256 KBPS TLM

IN 1 KBYTE PACKETS; NO EU CONVERSION REQUIRED.

RESPONSE TIME: I/O DELAY ALLOWABLE: 200.00 msec

LOCATION: COMMAND/CONTROL: LEVEL: **RATE:** 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: G

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.05 KIPC 0.05 KIPC REPETITION RATE: 31.00/S 31.00/S PROCESSOR MEMORY: PROGRAM SIZE: 0.20 KEYTES 8.00 KEYTES 0.20 KBYTES DATA REQUIREMENT:

8.00 KEYTES 0.00 KEYTES 0.00 KBYTES DATA STORAGE: SECONDARY: PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

ARCHIVAL: \* OF DISPLAYS: 0.00 KBYTES 0.00 KEYTES

0 Ω

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 1.5.3P NAME: DATA EXTRACTION

DATA SOURCES:

METHODOLOGY: CORE DATA TRAFFIC ANALYSIS. ASSUME WORST CASE OF 64 KEPS TLM

IN 1 KBYTE PACKETS: NO EU CONVERSION REQUIRED.

RESPONSE TIME: I/O DELAY ALLOWABLE: 200.00 msec

COMMAND/CONTROL: LEVEL: LOCATION: RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: G

DIAGNOSTICS/SELF TEST: REQUIPED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH

0.05 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.05 KIPC REPETITION RATE: 8.00/S 8.00/S

PROCESSOR MEMORY: PROGRAM SIZE: 0.20 KBYTES 0.20 KBYTES 8.00 KBYTES 0.00 KBYTES 8.00 KBYTES

DATA REQUIREMENT:
DATA STORAGE: SECONDARY:
PERISHABILITY:
ARCHIVAL: 0.00 KBYTES 0.00% IN 0.00HRS 0.00% IN 0.00HRS

0.00 KEYTES 0.00 KEYTES

\* OF DISPLAYS: 0 0

SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 1.5.4 NAME: DISPLAYS AND CONTROLS

DATA SOURCES:

METHODOLOGY: ENG ANLYS OF STS OPS; CORE DATA TRAFFIC ANLYS. I/O ESTIMATED PER

WORKSTN. PROC REQ ESTIMATED FOR TOTAL NO OF WORKSTATIONS(50).

RESPONSE TIME: I/O DELAY ALLOWABLE:

COMMAND/CONTROL: LEVEL: LOGATION: RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: G

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 1 INTERVAL: 1.00 SEC

REQUIREMENTS: IOC GROWTH

DATA PROCESSING INSTRUCTIONS PER CYCLE: 150000.00 KIPC 225000.00 KIPC REPETITION RATE: 1.00/S 1.00/S

PROCESSOR MEMORY: PROGRAM SIZE: 100000.00 KEYTES 150000.00 KEYTES

DATA REQUIREMENT: 100000.00 KEYTES 150000.00 KEYTES

DATA REQUIREMENT: 100000.00 KEYTES 150000.00 KEYTES
DATA STORAGE: SECONDARY: 10000000.00 KEYTES 15000000.00 KEYTES

PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS
ARCHIVAL: 0.00 KBYTES 0.00 KBYTES

# OF DISPLAYS: 2500 3750

100.00 msec

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 1.5.4P NAME: DISPLAYS AND CONTROLS

DATA SOURCES:

METHODOLOGY: ENG ANLYS OF OPS; CORE DATA TRAFFIC ANLYS. I/O ESTIMATED PER

WORKSTN. PROC REQ ESTIMATED FOR TOTAL NO OF WORKSTATIONS(20).

RESPONSE TIME: I/O DELAY ALLOWABLE: 100.00 msec

COMMAND/CONTROL: LEVEL: LOCATION: RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: G

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 1 INTERVAL: 1.00 SEC

REQUIREMENTS: IOC GROWTH
DATA PROCESSING INSTRUCTIONS PER CYCLE: 60000.00 KIPC 90000.00 KIPC

REPETITION RATE: 1.00/S 1.00/S
PROCESSOR MEMORY: PROGRAM SIZE: 40000.00 KBYTES 60000.00 KBYTES
DATA REQUIREMENT: 40000.00 KBYTES 60000.00 KBYTES

DATA STORAGE: SECONDARY: 4000000.00 KEYTES 6000000.00 KEYTES
PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

ARCHIVAL: 0.00 KEYTES 0.00 KEYTES • OF DISPLAYS: 1000 1500

SSDS FUNCTIONAL DATA SHEET 20-JUL-1985

FUNCTION NO: 1.5.5 NAME: ENGINEERING DATA ANALYSIS

DATA SOURCES:

**METHODOLOGY:** 

RESPONSE TIME: I/O DELAY ALLOWABLE: 600.00 msec

LOCATION: RATE: 0.00 COMMAND/CONTROL: LEVEL:

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: G

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH 22500.00 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 15000.00 KIPC

1.00/8 REPETITION RATE: 1.00/S 15000.00 KBYTES

1.00/S 10000.00 KEYTES 10000.00 KEYTES PROCESSOR MEMORY: PROGRAM SIZE: DATA REQUIREMENT: 15000.00 KBYTES

1000000.00 KBYTES 15000.00 KBYTES DATA STORAGE: SECONDARY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS PERISHABILITY:

0.00 KBYTES O.OO KEYTES ARCHIVAL:

\* OF DISPLAYS: 250 375

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 1.5.5P NAME: ENGINEERING DATA ANALYSIS

DATA SOURCES:

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE: 600.00 msec

COMMAND/CONTROL: LEVEL: LOCATION: RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: G

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC
DATA PROCESSING INSTRUCTIONS PER CYCLE: 15000.00 KIPC GROWTH 22500.00 KIPC

REPETITION RATE: 1.00/S 1.00/S
Y: PROGRAM SIZE: 10000.00 KBYTES 15000.00 KBYTES PROCESSOR MEMORY: PROGRAM SIZE: DATA REQUIREMENT: 10000.00 KBYTES 15000.00 KBYTES

DATA STORAGE: SECONDARY: 1000000.00 KBYTES 1500000.00 KBYTES 0.00% IN 0.00HRS 0.00% IN 0.00HRS PERISHABILITY: ARCHIVAL: 0.00 KBYTES 0.00 KBYTES

\* OF DISPLAYS: 250 375

FUNCTION NO: 1.5.6 NAME: CORE DATA ACCOUNTING

DATA SOURCES:

METHODOLOGY: ENG ANALYSIS. SPACE STATION TLM ONLY. 32 KBYTES/SEC / 5

(COMPRESSION) \* 2 (DB OVERHEAD) \* 2 YEARS-SS ENG DATA

RESPONSE TIME: I/O DELAY ALLOWABLE: 600.00 msec

COMMAND/CONTROL: LEVEL: LOCATION: RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: G

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 1 INTERVAL: 1.00 SEC

REQUIREMENTS: IOC GROWTH
DATA PROCESSING INSTRUCTIONS PER CYCLE: 8000.00 KIPC 12000.00 KIPC
REPETITION RATE: 1.00/S 1.00/S
PROCESSOR MEMORY: PROGRAM SIZE: 2000.00 KEYTES 3000.00 KEYTES

PROCESSOR MEHORI: PROGRAM SIZE: 2000.00 KBYTES 5000.00 KBYTES 3000.00 KBYTES 3000.00 KBYTES 3000.00 KBYTES

DATA STORAGE: SECONDARY: 100000.00 KBYTES 900000.00 KBYTES
PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS
ARCHIVAL: 800000000.00 KBYTES 800000000.00 KBYTES

 **OF DISPLAYS:** 100 150

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 1.5.6P NAME: CORE DATA ACCOUNTING

DATA SOURCES:

METHODOLOGY: ENG ANALYSIS. PLATFORM TLM ONLY. 5 KEYTES/SEC / 5 (COMPRESSION)

\* 2 (DB OVERHEAD) \* 2 YEARS-SS ENG DATA

RESPONSE TIME: I/O DELAY ALLOWABLE: 600.00 msec

COMMAND/CONTROL: LEVEL: LOCATION: RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: G

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 1 INTERVAL: 1.00 SEC

REQUIREMENTS: IOC GROWTH
DATA PROCESSING INSTRUCTIONS PER CYCLE: 8000.00 KIPC 12000.00 KIPC

REPETITION RATE: 1.00/S 1.00/S
PROCESSOR MEMORY: PROGRAM SIZE: 2000.00 KBYTES 3000.00 KBYTES

 PROCESSOR MEMORY:
 PROGRAM SIZE:
 2000.00 KBYTES
 3000.00 KBYTES

 DATA REQUIREMENT:
 2000.00 KBYTES
 3000.00 KBYTES

 DATA STORAGE:
 SECONDARY:
 6000000.00 KBYTES
 900000.00 KBYTES

DATA STORAGE: SECONDARY: 6000000.00 KBYTES 900000.00 KBYTES
PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS
ARCHIVAL: 200000000.00 KBYTES 200000000.00 KBYTES

**+ OF DISPLAYS:** 100 150

SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 2.1 NAME: VALIDATE PAYLOAD COMMANDS DATA

DATA SOURCES: WOODS HOLE. DATABASE AND CCSDS COMMAND FORMAT

METHODOLOGY: ENGINEERING ANALYSIS BASED ON WOODS HOLE DATABASE AND CCSDS

COMMAND FORMAT

RESPONSE TIME: I/O DELAY ALLOWABLE:

500.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: G.O RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 1 INTERVAL: 5.00 SEC

IOC REQUIREMENTS: GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 4.00 KIPC 6.00 KIPC REPETITION RATE: 10.00/HR 15.00/HR PROCESSOR MEMORY: PROGRAM SIZE: 4.00 KBYTES 6.00 KEYTES DATA REQUIREMENT: 20.00 KBYTES 40.00 KEYTES DATA STORAGE: SECONDARY:

TORAGE: SECONDARY: 10000.00 KBYTES 20000.00 KBYTES
PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS
ARCHIVAL: 0.00 KBYTES 0.00 KBYTES

OF DISPLATS: . 10 20

20-JUL-1985

SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 2.1P NAME: VALIDATE PLATFORM PAYLOAD COMMANDS DATA

DATA SOURCES: WOODS HOLE. DATABASE AND CCSDS COMMAND FORMAT

METHODOLOGY: ENGINEERING ANALYSIS BASED ON WOODS HOLE DATABASE AND CCSDS

COMMAND FORMAT

RESPONSE TIME: I/O DELAY ALLOWABLE: 500.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: G,O RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 1 INTERVAL: 5.00 SEC

REQUIREMENTS: IOC GROWTH
DATA PROCESSING INSTRUCTIONS PER CYCLE: 4.00 KIPC 6.00 KIPC

REPETITION RATE: 10.00/HR 15.00/HR
PROCESSOR MEMORY: PROGRAM SIZE: 4.00 KBYTES 6.00 KBYTES
DATA REQUIREMENT: 20.00 KBYTES 40.00 KBYTES

DATA REQUIREMENT: 20.00 KBYTES 40.00 KBYTES
DATA STORAGE: SECONDARY: 10000.00 KBYTES 20000.00 KBYTES
PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

ARCHIVAL: 0.00 KBYTES 0.00 KBYTES

OF DISPLAYS: 10 20

SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 2.2

NAME: CHECK SSDS SERVICE REQUIREMENTS

DATA SOURCES: WOODS HOLE DATABASE AND CCSDS COMMAND FORMAT

METHODOLOGY: ENGINEERING ANALYSIS BASED ON WOODS HOLE DATBASE AND CCSDS

COMMAND FORMAT .

RESPONSE TIME: I/O DELAY ALLOWABLE:

500.00 msec

COMMAND/CONTROL: LEVEL: A

LOCATION: O.G RATE:

0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE:

0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G

PHYSICAL LOCATION CODE: M

IOC

DIAGNOSTICS/SELF TEST: REQUIRED: Y

NUMBER: 1 INTERVAL:

5.00 SEC

REQUIREMENTS: DATA PROCESSING INSTRUCTIONS PER CYCLE:

5.00 KIPC

GROWTH 7.50 KIPC

REPETITION RATE:

20.00/MN

30.00/MN

PROCESSOR MEMORY: PROGRAM SIZE: DATA REQUIREMENT: 20.00 KEYTES 50.00 KEYTES

30.00 KBYTES 100.00 KBYTES

DATA STORAGE: SECONDARY:

1000.00 KBYTES

2000.00 KBYTES

PERISHABILITY: ARCHIVAL:

0.00% IN 0.00HRS 0.00% IN 0.00HRS

+ OF DISPLAYS:

0.00 KEYTES 5

0.00 KBYTES 10

20-JUL-1985

SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 2.2P

NAME: CHECK PLATFORM P/L COMMAND RESTRICTION/CONSTRAINT

DATA SOURCES: WOODS HOLE DATABASE AND CCSDS COMMAND FORMAT

METHODOLOGY: ENGINEERING ANALYSIS BASED ON WOODS HOLE DATBASE AND CCSDS COMMAND FORMAT

RESPONSE TIME: I/O DELAY ALLOWABLE:

500.00 msec

COMMAND/CONTROL: LEVEL: A

LOCATION: O.G RATE:

0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE:

0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G

PHYSICAL LOCATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED: Y

NUMBER: 1 INTERVAL:

5.00 SEC

REQUIREMENTS:

IOC

GROWTH

DATA PROCESSING INSTRUCTIONS PER CYCLE:

5.00 KIPC 20.00/MN

7.50 KIPC

REPETITION RATE: PROCESSOR MEMORY: PROGRAM SIZE:

20.00 KBYTES 50.00 KBYTES

30.00/MN 30.00 KBYTES

DATA REQUIREMENT: DATA STORAGE: SECONDARY:

1000.00 KBYTES 0.00% IN 0.00HRS 0.00% IN 0.00HRS

100.00 KBYTES 2000.00 KBYTES

PERISHABILITY: ARCHIVAL:

0.00 KBYTES

0.00 KBYTES

\* OF DISPLAYS:

5

10

SSDS FUNCTIONAL DATA SHEET 20-JUL-1985

FUNCTION NO: 2.3.1 NAME: AUTHORIZE OPERATOR

DATA SOURCES: EXPERIENCE

METHODOLOGY: ESTIMATE ACCEPTABLE DELAY TO OPERATOR SIGN-ON AT 10 SECONDS.

ESTIMATE STORAGE FOR LIST OF OPERATIONS ALLOWED PER OPERATOR.

RESPONSE TIME: I/O DELAY ALLOWABLE: 10000.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: G.O RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: S PHYSICAL LOCATION CODE: D

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH 4.00 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 6.00 KIPC REPETITION RATE: 10.00/HR 15.00/HR PROCESSOR MEMORY: PROGRAM SIZE: 4.00 KEYTES 6.00 KBYTES DATA REQUIREMENT: 20.00 KBYTES 40.00 KBYTES DATA STORAGE: SECONDARY: 1000.00 KBYTES 2000.00 KBYTES

PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS ARCHIVAL: 0.00 KBYTES 0.00 KBYTES

\* OF DISPLAYS:

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 2.3.1P NAME: AUTHORIZE OPERATOR

DATA SOURCES: EXPERIENCE

METHODOLOGY: ESTIMATE ACCEPTABLE DELAY TO OPERATOR SIGN-ON AT 10 SECONDS.

ESTIMATE STORAGE FOR LIST OF OPERATIONS ALLOWED PER OPERATOR.

RESPONSE TIME: I/O DELAY ALLOWABLE: 10000.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: G.O RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: S PHYSICAL LOCATION CODE: D

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 4.00 KIPC : 6.00 KIPC REPETITION RATE:

10.00/HR 15.00/HR PROCESSOR MEMORY: PROGRAM SIZE: 6.00 KEYTES 40.00 KEYTES 4.00 KBYTES DATA REQUIREMENT: 20.00 KBYTES

DATA STORAGE: SECONDARY: 500.00 KBYTES 1000.00 KBYTES PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

ARCHIVAL: 0.00 KBYTES 0.00 KBYTES \* OF DISPLAYS: 0

FUNCTION NO: 2.3.2 NAME: AUTHORIZE OPERATION

DATA SOURCES:

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE: 10000.00 msec

LOCATION: G.O RATE: 0.00 COMMAND/CONTROL: LEVEL: A

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH: NONE

SYSTEM DEPENDENCY CODE: S PHYSICAL LOCATION CODE: D

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

IOC 2.50 KIPC REQUIREMENTS: GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 4.00 KIPC 1.00/MN REPETITION RATE: 1.00/MN PROCESSOR MEMORY: PROGRAM SIZE: 10.00 KBYTES 15.00 KEYTES 25.00 KBYTES 500.00 KBYTES DATA REQUIREMENT: 50.00 KBYTES DATA STORAGE: SECONDARY: 1000.00 KBYTES PERISHABILITY:

0.00% IN 0.00HRS 0.00% IN 0.00HRS 0.00 KBYTES 0.00 KBYTES ARCHIVAL: \* OF DISPLAYS: Ω 0

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 2.3.2P NAME: AUTHORIZE OPERATION

DATA SOURCES:

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE: 10000.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: G.O RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH: NONE

SYSTEM DEPENDENCY CODE: S PHYSICAL LOCATION CODE: D

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL:

IOC 2.50 KIPC REQUIREMENTS: GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 4.00 KIPC

REPETITION RATE: 20.00/HR 20.00/HR PROCESSOR MEMORY: PROGRAM SIZE: 10.00 KBYTES 15.00 KBYTES

25.00 KBYTES 500.00 KBYTES DATA REQUIREMENTS
DATA STORAGE: SECONDARY:
PERISHABILITY: DATA REQUIREMENT: 50.00 KBYTES 1000.00 KBYTES

0.00% IN 0.00HRS 0.00% IN 0.00HRS 0.00 KEYTES ARCHIVAL: O.OO KEYTES

\* OF 'DISPLAYS: O 0

SSDS FUNCTIONAL DATA SHEET 20-JUL-1985

FUNCTION NO: 2.4 NAME: PROVIDE ANCILLARY DATA

DATA SOURCES:

METHODOLOGY: EST. 20 SUBSYSTEMS REQUESTING 100 BYTES (800 BITS) ONCE PER

SECOND VIA 10 BYTE (80 BIT) REQUEST. EST. STORES AT 10 TIMES REQ

RESPONSE TIME: I/O DELAY ALLOWABLE: 100.00 msec

LOCATION: 0 RATE: 176.00 COMMAND/CONTROL: LEVEL: A

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

PHYSICAL LOCATION CODE: M SYSTEM DEPENDENCY CODE: I

0.00 SEC DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL:

REQUIREMENTS: IOC GROWTH 0.20 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.30 KIPC REPETITION RATE: 22.00/S 30.00/S PROCESSOR MEMORY: PROGRAM SIZE: 2.00 KEYTES 3.00 KBYTES DATA REQUIREMENT: 10.00 KBYTES 20.00 KEYTES 0.00 KBYTES DATA STORAGE: SECONDARY: 0.00 KBYTES

PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS 0.00 KBYTES ARCHIVAL: 0.00 KBYTES

\* OF DISPLAYS: 0 1

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 2.4P NAME: PROVIDE ANCILLARY DATA

DATA SOURCES:

METHODOLOGY: EST. 20 SUBSYSTEMS REQUESTING 100 BYTES (800 BITS) ONCE PER

SECOND VIA 10 BYTE (80 BIT) REQUEST. EST. STORES AT 10 TIMES REQ

RESPONSE TIME: I/O DELAY ALLOWABLE: 100.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: O RATE: 176.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.14 KIPC 0.21 KIPC REPETITION RATE: 22.00/S 30.00/S

PROCESSOR MEMORY: PROGRAM SIZE: 1.40 KBYTES 2.10 KBYTES DATA REQUIREMENT:

7.00 KBYTES 14.00 KBYTES DATA STORAGE: SECONDARY: 0.00 KBYTES 0.00 KBYTES

PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS ARCHIVAL: 0.00 KBYTES

0.00 KBYTES \* OF DISPLAYS: 0 0

SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 2.5.1 NAME: CUSTOMER DATA PROCESSING

DATA SOURCES: WOODS HOLE DATABASE

METHODOLOGY: ENGINEERING ESTIMATE

RESPONSE TIME: I/O DELAY ALLOWABLE:

1000.00 msec

COMMAND/CONTROL: LEVEL: A.I

LOCATION: O

3.00

DATA QUALITY: MAXIMUM BIT ERROR RATE:

1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: O INTERVAL: 15.00 SEC

REQUIREMENTS: IOC
DATA PROCESSING INSTRUCTIONS PER CYCLE: 2.50 KIPC
REPETITION RATE: 4.00/MN

GROWTH 2.50 KIPC 4.00/

REPETITION RATE: PROCESSOR MEMORY: PROGRAM SIZE: DATA REQUIREMENT:

100.00 KEYTES 200.00 KEYTES 100.00 KBYTES 100.00 KBYTES 200.00 KBYTES 1000.00 KBYTES 1500.00 KBYTES 0.00% IN 0.00HRS 0.00% IN 0.00HRS

RATE:

DATA STORAGE: SECONDARY:
PERISHABILITY: ARCHIVAL: • OF DISPLAYS:

O.OO KBYTES 0.00 KBYTES

10 20

20-JUL-1985

SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 2.5.1P NAME: CUSTOMER DATA PROCESSING

DATA SOURCES: WOODS HOLE DATABASE

METHODOLOGY: ENGINEERING ESTIMATE

RESPONSE TIME: I/O DELAY ALLOWABLE:

1000.00 msec

RATE:

COMMAND/CONTROL: LEVEL: A

LOCATION: O

DATA QUALITY: MAXIMUM BIT ERROR RATE:

1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 0 INTERVAL:

3.00

REQUIREMENTS: IOC
DATA PROCESSING INSTRUCTIONS PER CYCLE: 2.50 KIPC
REPETITION RATE: 2.00/MN REPETITION RATE:

GROWTH 2.50 KIPC 2.00/

PROCESSOR MEMORY: PROGRAM SIZE: DATA REQUIREMENT: DATA STORAGE: SECONDARY:

2.00/mm 100.00 KEYTES 100.00 KEYTES 1000.00 KBYTES

100.00 KBYTES 200.00 KBYTES 1500.00 KBYTES

PERISHABILITY: ARCHIVAL:

0.00% IN 0.00HRS 0.00% IN 0.00HRS 0.00 KBYTES

0.00 KBYTES

\* OF DISPLAYS:

10

20

FUNCTION NO: 2.5.2 NAME: CUSTOMER PAYLOAD OPERATION

DATA SOURCES: WOODS HOLE DATABASE METHODOLOGY: ENGINEERING ESTIMATE

RESPONSE TIME: I/O DELAY ALLOWABLE: 1000.00 msec

COMMAND/CONTROL: LEVEL: A.I LOCATION: O RATE: 3.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 15 INTERVAL: 0.00 SEC

IOC REQUIREMENTS: GROWTH 2.00 KIPC 4.00/MM DATA PROCESSING INSTRUCTIONS PER CYCLE: 2.00 KIPC REPETITION RATE: 4.00/MN 25.00 KBYTES 50.00 KBYTES 25.00 KBYTES 50.00 KBYTES 1000.00 KBYTES 2000.00 KBYTES 0.00% IN 0.00HRS 0.00% IN 0.00HRS PROCESSOR MEMORY: PROGRAM SIZE: DATA REQUIREMENT: DATA STORAGE: SECONDARY:
PERISHABILITY:
ARCHIVAL:

0.00 KEYTES 0.00 KEYTES \* OF DISPLAYS: ٥ 0

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 2.5.2P NAME: CUSTOMER PAYLOAD OPERATION

DATA SOURCES: WOODS HOLE DATABASE METHODOLOGY: ENGINEERING ESTIMATE

RESPONSE TIME: I/O DELAY ALLOWABLE: 1000.00 msec

COMMAND/CONTROL: LEVEL: A.I LOCATION: 0 RATE: 3.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED: T NUMBER: 15 INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 2.00 KIPC 2.00 KIPC REPETITION RATE: 1.00/MN 1.00/MN 25.00 KBYTES 50.00 KBYTES 50.00 KBYTES 1000.00 KBYTES 2000.00 KBYTES PROCESSOR MEMORY: PROGRAM SIZE:

DATA REQUIREMENT:
DATA STORAGE: SECONDARY:
PERISHABILITY:
ARCHIVAL: 0.00% IN 0.00HRS 0.00% IN 0.00HRS O.OO KBYTES O.OO KBYTES

\* OF DISPLAYS: 0 O

SSDS FUNCTIONAL DATA SHEET 20-JUL-1985

FUNCTION NO: 2.5.3.1 NAME: OTV SERVICE

DATA SOURCES: TMS-MSFC 6/83, COMM 1309

METHODOLOGY: ENGINEERING ESTIMATE

RESPONSE TIME: I/O DELAY ALLOWABLE: 1000.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: O RATE: 0.05

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: R

NUMBER: O INTERVAL: DIAGNOSTICS/SELF TEST: REQUIRED: Y 60.00 SEC

REQUIREMENTS: IOC GROWTH 0.00 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 1.00 KIPC REPETITION RATE: 0.00/MN 6.00/MN PROCESSOR MEMORY: PROGRAM SIZE: 0.00 KEYTES 25.00 KBYTES DATA REQUIREMENT: 0.00 KEYTES 10.00 KBYTES DATA STORAGE: SECONDARY: 0.00 KEYTES 100.00 KBYTES PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

ARCHIVAL: 0.00 KEYTES 0.00 KBYTES \* OF DISPLAYS:

0 2

SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 2.5.3.2 NAME: OTV CHECKOUT & DIAGNOSTICS

DATA SOURCES: TMS-MSFC 6/83, COMM 1309, OMV REQ'TS 1/85

METHODOLOGY: ENGINEERING ESTIMATE

RESPONSE TIME: I/O DELAY ALLOWABLE:

1000.00 msec

COMMAND/CONTROL: LEVEL: A

LOCATION: O

RATE:

DATA QUALITY: MAXIMUM BIT ERROR RATE:

0.10

SYSTEM DEPENDENCY CODE: U

1.00 E -6

SYNCHRONIZATION WITH:

PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: Y

NUMBER:

O INTERVAL:

1.00 SEC

REQUIREMENTS:

IOC 0.00 KIPC GROWTH

DATA PROCESSING INSTRUCTIONS PER CYCLE:

0.00/HR

26.00 KIPC 1.00/HR

REPETITION RATE: PROCESSOR MEMORY: PROGRAM SIZE:

0.00 KEYTES

100.00 KBYTES

DATA REQUIREMENT:

0.00 KBYTES

100.00 KBYTES

DATA STORAGE: SECONDARY: PERISHABILITY: 0.00 KBYTES

0.00 KBYTES 0.00% IN 0.00HRS 0.00% IN 0.00HRS

ARCHIVAL:

0.00 KBYTES

9000.00 KBYTES

\* OF DISPLAYS: 0

5

FUNCTION NO: 2.5.3.3 NAME: OTV DEPLOYMENT/RETRIEVAL

DATA SOURCES: TMS-MSFC 6/83, COMM 1309, OMV REQ'TS 1/85

METHODOLOGY: ENGINEERING ESTIMATE

RESPONSE TIME: I/O DELAY ALLOWABLE: 100.00 msec

COMMAND/CONTROL: LEVEL: I LOCATION: O RATE: 1.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH: 4.2.3

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 0 INTERVAL: 0.10 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.00 KIPC 1.00 KIPC REPETITION RATE: 0.00/HR 1.00/HR 0.00 KEYTES 0.00 KEYTES PROCESSOR MEMORY: PROGRAM SIZE: 5.00 KBYTES DATA REQUIREMENT: 10.00 KBYTES DATA STORAGE: SECONDARY: 0.00 KEYTES 0.00 KBYTES PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

ARCHIVAL: 0.00 KEYTES 0.00 KEYTES

OF DISPLAYS: 0 2

FUNCTION NO: 2.5.3.4 NAME: OTV OPERATION

DATA SOURCES: TMS-MSFC 6/83, COMM 1309, OMV REQ'TS 1/85

METHODOLOGY: ENGINEERING ESTIMATE

RESPONSE TIME: I/O DELAY ALLOWABLE: 1000.00 msec

COMMAND/CONTROL: LEVEL: I LOCATION: 0 RATE: 1.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: U PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: O INTERVAL: 1.00 SEC

IOC GROWTH REQUIREMENTS: DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.00 KIPC 2.00 KIPC 60.00/HR REPETITION RATE: 0.00/HR PROCESSOR MEMORY: PROGRAM SIZE: 0.00 KEYTES 10.00 KBYTES DATA REQUIREMENT: 0.00 KEYTES 20.00 KBYTES DATA STORAGE: SECONDARY: 0.00 KBYTES 0.00 KEYTES PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

0.00 KEYTES 0.00 KBYTES ARCHIVAL: \* OF DISPLAYS: 0 2

SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 2.5.3.5 NAME: OTV STATUS

DATA SOURCES: TMS-MSFC 6/83, COMM 1309, OMV REQ'TS 1/85

METHODOLOGY: ENGINEERING ESTIMATE

RESPONSE TIME: I/O DELAY ALLOWABLE:

1000.00 msec

RATE:

COMMAND/CONTROL: LEVEL: A

LOCATION: 0

1.00

DATA QUALITY: MAXIMUM BIT ERROR RATE:

1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: U

PHYSICAL LOCATION CODE: F

DIAGNOSTICS/SELF TEST: REQUIRED: Y

NUMBER: O INTERVAL: 1.00 SEC

REQUIREMENTS: DATA PROCESSING INSTRUCTIONS PER CYCLE: REPETITION RATE:

IOC 0.00 KIPC 0.00/MM

GROWTH 3.00 KIPC 1.00/S

PROCESSOR MEMORY: PROGRAM SIZE: DATA REQUIREMENT:

0.00 KEYTES 0.00 KEYTES 0.00 KEYTES 10.00 KBYTES 5.00 KBYTES 0.00 KBYTES

DATA STORAGE: SECONDARY: PERISHABILITY: ARCHIVAL:

0.00 KBYTES

0.00% IN 0.00HRS 0.00% IN 0.00HRS 0.00 KBYTES

2

\* OF DISPLAYS: 0

G-43

SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 2.5.4.1 NAME: OMV SERVICE

DATA SOURCES: TMS-MSFC 6/83, COMM 1304

METHODOLOGY: ENGINEERING ESTIMATE

RESPONSE TIME: I/O DELAY ALLOWABLE:

1000.00 msec

COMMAND/CONTROL: LEVEL: A

LOCATION: O

RATE: 0.05

DATA QUALITY: MAXIMUM BIT ERROR RATE:

1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I

PHYSICAL LOCATION CODE: R

DIAGNOSTICS/SELF TEST: REQUIRED: Y

NUMBER: O INTERVAL:

2

60.00 SEC

GROWTH

REQUIREMENTS: DATA PROCESSING INSTRUCTIONS PER CYCLE: REPETITION RATE: PROCESSOR MEMORY: PROGRAM SIZE: DATA REQUIREMENT:

DATA STORAGE: SECONDARY: PERISHABILITY:

ARCHIVAL: \* OF DISPLAYS:

IOC 0.75 KIPC 1.00 KIPC 6.00/MN 6.00/MN 15.00 KBYTES 25.00 KBYTES 6.00 KEYTES 10.00 KBYTES 75.00 KEYTES

100.00 KBYTES 0.00% IN 0.00HRS 0.00% IN 0.00HRS 0.00 KEYTES 0.00 KEYTES 2

SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 2.5.4.2 NAME: OMV CHECKOUT & DIAGNOSTICS

DATA SOURCES: TMS-MSFC 6/83, COMM 1304, OMV REQ'TS 1/85

METHODOLOGY: ENGINEERING ESTIMATE

RESPONSE TIME: I/O DELAY ALLOWABLE:

1000.00 msec

COMMAND/CONTROL: LEVEL: A

LOCATION: O

RATE: 0.10

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: U

PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: O INTERVAL:

1.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 20.00 KIPC 26.00 KIPC 1.00/HR 1.00/HR REPETITION RATE: PROCESSOR MEMORY: PROGRAM SIZE: 75.00 KBYTES 100.00 KBYTES DATA REQUIREMENT: 75.00 KBYTES 100.00 KEYTES DATA STORAGE: SECONDARY: 75.00 KEYTES 100.00 KBYTES PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS ARCHIVAL: 9000.00 KBYTES

\* OF DISPLAYS:

5

9000.00 KBYTES

5

SSDS FUNCTIONAL DATA SHEET 20-JUL-1985

FUNCTION NO: 2.5.4.3 NAME: OMV DEPLOYMENT/RETRIEVAL

DATA SOURCES: TMS-MSFC 6/83, COMM 1304, OMV REQ'TS 1/85

METHODOLOGY: ENGINEERING ESTIMATE

100.00 msec RESPONSE TIME: I/O DELAY ALLOWABLE:

COMMAND/CONTROL: LEVEL: I LOCATION: O RATE: 1.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH: 4.2.3

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE:

O INTERVAL: DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 0.10 SEC

REQUIREMENTS: IOC GROWTH 1.00 KIPC 1.00 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 1.00/HR REPETITION RATE: 1.00/HR PROCESSOR MEMORY: PROGRAM SIZE: 5.80 KBYTES 5.00 KBYTES DATA REQUIREMENT: 8.00 KBYTES 10.00 KBYTES DATA STORAGE: SECONDARY: 0.00 KEYTES 0.00 KBYTES 0.00% IN 0.00HRS 0.00% IN 0.00HRS PERISHABILITY:

ARCHIVAL: 0.00 KBYTES 0.00 KBYTES \* OF DISPLAYS: 2 2

SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 2.5.4.4 NAME: REMOTE OPERATIONS CONTROL

DATA SOURCES: TMS-MSFC 6/83, COMM 1304, OMV REO'TS 1/85

METHODOLOGY: ENGINEERING ESTIMATE

RESPONSE TIME: I/O DELAY ALLOWABLE:

100.00 msec

COMMAND/CONTROL: LEVEL: I

LOCATION: O

RATE: 1.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: U

PHYSICAL LOCATION CODE: H

IOC

5.00/S

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: O INTERVAL:

2.00 KIPC

15.00 KBYTES

1.00 SEC

GROWTH

5.00/S

3.00 KIPC

21.00 KBYTES

REQUIREMENTS: DATA PROCESSING INSTRUCTIONS PER CYCLE: REPETITION RATE: PROCESSOR MEMORY: PROGRAM SIZE: DATA REQUIREMENT: DATA STORAGE: SECONDARY:

6.00 KBYTES 0.00 KEYTES PERISHABILITY: ARCHIVAL: 0.00 KBYTES

10.00 KBYTES 0.00 KBYTES 0.00% IN 0.00HRS 0.00% IN 0.00HRS

OF DISPLAYS:

2

0.00 KBYTES

2

FUNCTION NO: 2.5.4.5 NAME: OMV OPERATION

DATA SOURCES: TMS-MSFC 6/83, COMM 1304, OMV REO'TS 1/85

METHODOLOGY: ENGINEERING ESTIMATE

RESPONSE TIME: I/O DELAY ALLOWABLE: 1000.00 msec

COMMAND/CONTROL: LEVEL: I LOCATION: O RATE: 1.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: U PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: O INTERVAL: 1.00 SEC

IOC REQUIREMENTS: GROWTH 2.00 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 2.00 KIPC REPETITION RATE: 60.00/HR 60.00/HR PROCESSOR MEMORY: PROGRAM SIZE: 8.00 KEYTES 10.00 KBYTES 15.00 KETTES DATA REQUIREMENT: 20.00 KBYTES DATA STORAGE: SECONDARY: 0.00 KBYTES 0.00 KEYTES PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

ARCHIVAL: O.OO KEYTES 0.00 KEYTES \* OF DISPLAYS: 2 2 .

FUNCTION NO: 2.5.4.6 NAME: OMV STATUS (TO REMOTE CUSTOMER)

DATA SOURCES: TMS-MSFC 6/83, COMM 1304, OMV REQ'TS 1/85

METHODOLOGY:

ENGINEERING ESTIMATE

RESPONSE TIME: I/O DELAY ALLOWABLE:

1000.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: O RATE: 1.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: U PHYSICAL LOCATION CODE: F

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 0 INTERVAL: 1.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 2.00 KIPC 3.00 KIPC REPETITION RATE: 1.00/S 1.00/S PROCESSOR MEMORY: PROGRAM SIZE: 8.00 KBYTES 10.00 KBYTES DATA REQUIREMENT: 5.00 KEYTES 4.00 KBYTES DATA STORAGE: SECONDARY: 0.00 KBYTES 0.00 KBYTES

PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS
ARCHIVAL: 0.00 KBYTES 0.00 KBYTES

OF DISPLAYS: 2

20-JUL-1985

SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 2.5.5 NAME: CUSTOMER PAYLOAD CHECKOUT/SERVICE

DATA SOURCES: TMS-MSFC 6/83, COMM 1309, OMV REQ'TS 1/85

METHODOLOGY: ENGINEERING ESTIMATE

RESPONSE TIME: I/O DELAY ALLOWABLE:

1000.00 msec

RATE:

COMMAND/CONTROL: LEVEL: A

LOCATION: O

0.10

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G

PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: Y

NUMBER:

O INTERVAL:

1.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 25.00 KIPC 25.00 KIPC 0.10/DA REPETITION RATE: 0.10/

25.00 KBYTES

PROCESSOR MEMORY: PROGRAM SIZE: 30.00 KBYTES DATA REQUIREMENT: 1000.00 KBYTES 1200.00 KBYTES DATA STORAGE: SECONDARY: 0.00 KBYTES 0.00 KBYTES

PERISHABILITY:

100.00% IN 200.00HRS100.00% IN 200.00HRS 9000.00 KBYTES

ARCHIVAL:

9000.00 KEYTES

\* OF DISPLAYS: 10

10

FUNCTION NO: 2.6 NAME: SSPE CHECKOUT AND SERVICING

DATA SOURCES: TMS-MSFC 6/83, COMM 1309, OMV REQ'TS 1/85

METHODOLOGY: ENGINEERING ESTIMATE

RESPONSE TIME: I/O DELAY ALLOWABLE: 1000.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: O RATE: 0.10

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: U PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 0 INTERVAL: 1.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 25.00 KIPC 25.00 KIPC 2.00/DA REPETITION RATE: 2.00/DA PROCESSOR MEMORY: PROGRAM SIZE: 100.00 KEYTES 100.00 KBYTES DATA REQUIREMENT: 1000.00 KEYTES 1000.00 KBYTES DATA STORAGE: SECONDARY: 0.00 KBYTES 0.00 KEYTES

PERISHABILITY: 100.00% IN 200.00HRS100.00% IN 200.00HRS
ARCHIVAL: 9000.00 KEYTES 9000.00 KEYTES

OF DISPLAYS: 10 10

FUNCTION NO: 3.1.1 NAME: DEVELOP NORMAL DAY PAYLOAD OPERATIONS.

DATA SOURCES:

METHODOLOGY: RFP + CRSS + EXPERIENCE

RESPONSE TIME: I/O DELAY ALLOWABLE: 30000.00 msec

COMMAND/CONTROL: LEVEL: I LOCATION: U RATE: 0.05

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1000.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: N PHYSICAL LOCATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 64.00 KIPC 75.00 KIPC 1.00/MIN REPETITION RATE: 1.00/MIN PROCESSOR MEMORY: PROGRAM SIZE: 126.00 KEYTES 200.00 KBYTES 360.00 KBYTES DATA REQUIREMENT: 400.00 KBYTES DATA STORAGE: SECONDARY:
PERISHABILITY:
ARCHIVAL: 750.00 KBYTES 1000.00 KBYTES 10.00% IN 336.00HRS 10.00% IN 336.00HRS

504.00 KBYTES 620.00 KBYTES \* OF DISPLAYS: 5

SSDS FUNCTIONAL DATA SHEET 20-JUL-1985

FUNCTION NO: 3.1.1P NAME: DEVELOP NORMAL DAY PAYLOAD OPERATIONS

DATA SOURCES:

METHODOLOGY: RFP + CRSS + EXPERIENCE

RESPONSE TIME: I/O DELAY ALLOWABLE: 30000.00 msec

COMMAND/CONTROL: LEVEL: I LOCATION: U RATE: 0.05

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1000.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: M PHYSICAL LOCATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH 40.00 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 50.00 KIPC REPETITION RATE: 1.00/MIN 1.00/MIN

PROCESSOR MEMORY: PROGRAM SIZE: 60.00 KBYTES 100.00 KBYTES 100.00 KBYTES DATA REQUIREMENT: 200.00 KBYTES

DATA STORAGE: SECONDARY:
PERISHABILITY:
ARCHIVAL: 300.00 KBYTES 500.00 KBYTES 10.00% IN 336.00HRS 10.00% IN 336.00HRS 300.00 KBYTES

200.00 KBYTES \* OF DISPLAYS: 5 7.

FUNCTION NO: 3.1.2 NAME: DEVELOP NORMAL DAY CORE SYSTEM OPERATIONS

DATA SOURCES:

METHODOLOGY: RFP + EXPERIENCE

RESPONSE TIME: I/O DELAY ALLOWABLE: 30000.00 msec

COMMAND/CONTROL: LEVEL: I LOCATION: N RATE: 0.05

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1000.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: N PHYSICAL LOCATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC · GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 64.00 KIPC 75.00 KIPG REPETITION RATE: 1.00/MIN 1.00/MIN PROCESSOR MEMORY: PROGRAM SIZE: 126.00 KBYTES 200.00 KBYTES DATA REQUIREMENT: 360.00 KBYTES 400.00 KBYTES 750.00 KEYTES DATA STORAGE: SECONDARY: 1000.00 KBYTES

PERISHABILITY: 10.00% IN 336.00HRS 10.00% IN 336.00HRS ARCHIVAL: 504.00 KBYTES 620.00 KBYTES

\* OF DISPLAYS: 5

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 3.1.2P NAME: DEVELOP NORMAL DAY CORE SYSTEM OPERATIONS

DATA SOURCES:

METHODOLOGY: RFP + EXPERIENCE

RESPONSE TIME: I/O DELAY ALLOWABLE: 30000.00 msec

RATE: COMMAND/CONTROL: LEVEL: I LOCATION: N 0.05

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1000.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: N PHYSICAL LOCATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 40.00 KIPC 50.00 KIPC REPETITION RATE: 1.00/MIN 1.00/MIN PROCESSOR MEMORY: PROGRAM SIZE:

60.00 KBYTES 100.00 KBYTES 100.00 KBYTES 200.00 KBYTES

DATA REQUIREMENT:
DATA STORAGE: SECONDARY:
PERISHABILITY: 300.00 KBYTES 500.00 KBYTES 10.00% IN 336.00HRS 10.00% IN 336.00HRS

ARCHIVAL: 200.00 KBYTES 300.00 KBYTES \* OF DISPLAYS: 5

FUNCTION NO: 3.1.3 NAME: DEVELOP MODE COMPATIBILITY MATRIX

DATA SOURCES:

METHODOLOGY: EXPERIENCE

RESPONSE TIME: I/O DELAY ALLOWABLE: 30000.00 msec

COMMAND/CONTROL: LEVEL: I LOCATION: N RATE: 0.05

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1000.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: N PHYSICAL LOCATION CODE: T

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

IOC REQUIREMENTS: GROWTH 64.00 KIPC 75.00 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 1.00/MIN REPETITION RATE: 1.00/MIN PROCESSOR MEMORY: PROGRAM SIZE: 126.00 KEYTES 200.00 KBYTES 200.00 KEYTES 300.00 KEYTES 600.00 KEYTES 700.00 KEYTES DATA REQUIREMENT: DATA STORAGE: SECONDARY: PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

ARCHIVAL: 0.00 KEYTES 0.00 KEYTES

# OF DISPLAYS: 2 3

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 3.1.3P NAME: DEVELOP MODE COMPATIBILITY MATRIX

DATA SOURCES:

METHODOLOGY: EXPERIENCE

RESPONSE TIME: I/O DELAY ALLOWABLE: 30000.00 msec

COMMAND/CONTROL: LEVEL: I LOCATION: N RATE: 0.05

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1000.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: N PHYSICAL LOCATION CODE: T

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: 0 INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH
DATA PROCESSING INSTRUCTIONS PER CYCLE: 40.00 KIPC
REPETITION RATE: 10.00/HR 10.00/HR

PROCESSOR MEMORY: PROGRAM SIZE: 100.00 KEYTES 150.00 KEYTES

DATA REQUIREMENT: 100.00 KEYTES 200.00 KEYTES

ACCOUNTED

DATA STORAGE: SECONDARY: 300.00 KBYTES 400.00 KBYTES
PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS
ARCHIVAL: 0.00 KBYTES 0.00 KBYTES

FUNCTION NO: 3.1.4 NAME: DEVELOP MAJOR EVENT OPERATIONS

DATA SOURCES:

METHODOLOGY: RFP + EXPERIENCE

RESPONSE TIME: I/O DELAY ALLOWABLE:

30000.00 msec

RATE: 0.05 LOCATION: N COMMAND/CONTROL: LEVEL: I

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1000.00 E -6

SYNCHRONIZATION WITH:

PHYSICAL LOCATION CODE: M SYSTEM DEPENDENCY CODE: N

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

IOC GROWTH REQUIREMENTS: DATA PROCESSING INSTRUCTIONS PER CYCLE: 64.00 KIPC 75.00 KIPC REPETITION RATE: 1.00/MIN 1.00/MIN PROCESSOR MEMORY: PROGRAM SIZE: 126.00 KEYTES 200.00 KBYTES DATA REQUIREMENT: DATA STORAGE: SECONDARY: 360.00 KBYTES 400.00 KBYTES 750.00 KBYTES 1000.00 KBYTES PERISHABILITY: 10.00% IN 336.00HRS 10.00% IN 336.00HRS

ARCHIVAL: 504.00 KBYTES 620.00 KBYTES

\* OF DISPLAYS: 5

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 3.1.4P NAME: DEVELOP MAJOR EVENT OPERATIONS

DATA SOURCES:

METHODOLOGY: RFP + EXPERIENCE

RESPONSE TIME: I/O DELAY ALLOWABLE: 30000.00 msec

COMMAND/CONTROL: LEVEL: I LOCATION: N RATE: 0.05

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1000.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: N PHYSICAL LOCATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 35.00 KIPC 50.00 KIPC 10.00/HR REPETITION RATE: 10.00/HR

PROCESSOR MEMORY: PROGRAM SIZE: 70.00 KBYTES 100.00 KBYTES DATA REQUIREMENT: 100.00 KBYTES 200.00 KBYTES

DATA STORAGE: SECONDARY:
PERISHABILITY:
ARCHIVAL: 300.00 KBYTES 500.00 KBYTES

10.00% IN 336.00HRS 10.00% IN 336.00HRS 200.00 KBYTES 300.00 KBYTES

FUNCTION NO: 3.2.1 NAME: CONFIRM PAYLOAD AND CORE SCHEDULES

DATA SOURCES:

METHODOLOGY: CRSS + EXPERIENCE

RESPONSE TIME: I/O DELAY ALLOWABLE: 30000.00 msec

COMMAND/CONTROL: LEVEL: I LOCATION: N RATE: 0.05

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1000.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: T

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 36.00 KIPC 40.00 KIPC REPETITION RATE: 1.00/MIN 1.00/MIN PROCESSOR MEMORY: PROGRAM SIZE: 72.00 KBYTES 80.00 KBYTES 205.00 KBYTES DATA REQUIREMENT: 230.00 KBYTES 205.00 KBYTES 230.00 KBYTES 300.00 KBYTES 340.00 KBYTES 10.00% IN 336.00HRS 10.00% IN 336.00HRS DATA STORAGE: SECONDARY: PERISHABILITY:

ARCHIVAL: \* OF DISPLAYS: 400.00 KEYTES 500.00 KBYTES 5

SSDS FUNCTIONAL DATA SHEET 20-JUL-1985

FUNCTION NO: 3.2.1P NAME: CONFIRM PAYLOAD AND CORE SCHEDULES

DATA SOURCES:

METHODOLOGY: CRSS + EXPERIENCE

30000.00 msec RESPONSE TIME: I/O DELAY ALLOWABLE:

LOCATION: N RATE: COMMAND/CONTROL: LEVEL: I 0.05

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1000.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: T

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

IOC REQUIREMENTS: GROWTH 20.00 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 30.00 KIPC REPETITION RATE:
RY: PROGRAM SIZE:
DATA REQUIREMENT: 1.00/MIN 1.00/MIN 40.00 KBYTES PROCESSOR MEMORY: PROGRAM SIZE: 60.00 KBYTES

100.00 KBYTES 200.00 KBYTES 120.00 KBYTES 240.00 KBYTES

DATA STORAGE: SECONDARY:
PERISHABILITY:
ARCHIVAL: 10.00% IN 336.00HRS 10.00% IN 336.00HRS 300.00 KEYTES 350.00 KEYTES

# OF DISPLAYS: 5 .

FUNCTION NO: 3.2.2 NAME: INCORPORATE NEW/REVISED OPERATIONS

DATA SOURCES:

METHODOLOGY: EXPERIENCE

RESPONSE TIME: I/O DELAY ALLOWABLE: 30000.00 msec

COMMAND/CONTROL: LEVEL: I LOCATION: N RATE: 0.05

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1000.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: N PHYSICAL LOCATION CODE: T

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: 0 INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 36.00 KIPC 40.00 KIPC REPETITION RATE: 1.00/MIN 1.00/MIN PROCESSOR MEMORY: PROGRAM SIZE: 72.00 KEYTES 80.00 KBYTES DATA REQUIREMENT: 205.00 KBYTES 230.00 KBYTES DATA STORAGE: SECONDARY:
PERISHABILITY:
ARCHIVAL: 300.00 KBYTES 340.00 KBYTES 10.00% IN 336.00HRS 10.00% IN 336.00HRS

400.00 KEYTES 500.00 KEYTES \* OF DISPLAYS: 5 7

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 3.2.2P NAME: INCORPORATE NEW/REVISED OPERATIONS

DATA SOURCES:

METHODOLOGY: EXPERIENCE

RESPONSE TIME: I/O DELAY ALLOWABLE: 30000.00 msec

COMMAND/CONTROL: LEVEL: I LOCATION: N RATE: 0.05

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1000.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: N PHYSICAL LOCATION CODE: T

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: 0 INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH 20.00 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 25.00 KIPC REPETITION RATE: 1.00/MIN

1.00/MIN PROCESSOR MEMORY: PROGRAM SIZE: 40.00 KBYTES 50.00 KBYTES DATA REQUIREMENT: 150.00 KBYTES

120.00 KBYTES 150.00 KBYTES DATA STORAGE: SECONDARY:
PERISHABILITY: 175.00 KBYTES

10.00% IN 336.00HRS 10.00% IN 336.00HRS ARCHIVAL: 300.00 KBYTES 400.00 KBYTES

FUNCTION NO: 3.2.3 NAME: CHECK FOR CONFLICTS

DATA SOURCES:

METHODOLOGY: CRSS + EXPERIENCE

RESPONSE TIME: I/O DELAY ALLOWABLE: 30000.00 msec

COMMAND/CONTROL: LEVEL: I LOCATION: N RATE: 0.05

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1000.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: N PHYSICAL LOCATION CODE: T

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 36.00 KIPC 40.00 KIPC REPETITION RATE: 1.00/MIN 1.00/MIN PROCESSOR MEMORY: PROGRAM SIZE: 72.00 KBYTES 80.00 KBYTES 205.00 KEYTES 300.00 KEYTES DATA REQUIREMENT: 230.00 KBYTES DATA STORAGE: SECONDARY:
PERISHABILITY:
ARCHIVAL: 300.00 KEYTES 340.00 KEYTES 0.00% IN 0.00HRS 0.00% IN 0.00HRS

100.00 KEYTES 120.00 KEYTES \* OF DISPLAYS: 2 3

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 3.2.3P NAME: CHECK FOR CONFLICTS

DATA SOURCES:

METHODOLOGY: CRSS + EXPERIENCE

RESPONSE TIME: I/O DELAY ALLOWABLE: 30000.00 msec

COMMAND/CONTROL: LEVEL: I LOCATION: N RATE: 0.05

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1000.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: N PHYSICAL LOCATION CODE: T

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: 0 INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH 20.00 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 25.00 KIPC REPETITION RATE: 1.00/MIN 1.00/MIN

40.00 KBYTES PROCESSOR MEMORY: PROGRAM SIZE: 40.00 KEYTES 50.00 KBYTES 130.00 KBYTES 150.00 KBYTES 170.00 KBYTES

DATA REQUIREMENT:
DATA STORAGE: SECONDARY:
PERISHABILITY:
ARCHIVAL: 0.00% IN 0.00HRS 0.00% IN 0.00HRS 100.00 KBYTES 120.00 KBYTES

FUNCTION NO: 3.2.4 NAME: CHECK FOR FACILITIES CAPABILITIES

DATA SOURCES:

METHODOLOGY: CRSS + EXPERIENCE

RESPONSE TIME: I/O DELAY ALLOWABLE:

30000.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: N RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1000.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: N PHYSICAL LOCATION CODE: T

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: 0 INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH
DATA PROCESSING INSTRUCTIONS PER CYCLE: 36.00 KIPC 40.00 KIPC
REPETITION RATE: 1.00/MIN 1.00/MIN
PROCESSOR MEMORY: PROGRAM SIZE: 72.00 KEYTES 80.00 KEYTES

DATA REQUIREMENT: 205.00 KEYTES 230.00 KEYTES

DATA STORAGE: SECONDARY: 300.00 KEYTES 340.00 KEYTES

PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

ARCHIVAL: 100.00 KBYTES 120.00 KBYTES

\* OF DISPLAYS: 2 3

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 3.2.4P NAME: CHECK FOR FACILITIES CAPABILITIES

DATA SOURCES:

METHODOLOGY: CRSS + EXPERIENCE

RESPONSE TIME: I/O DELAY ALLOWABLE: 30000.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: N RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1000.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: N PHYSICAL LOCATION CODE: T

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH
DATA PROCESSING INSTRUCTIONS PER CYCLE: 20.00 KIPC 25.00 KIPC

REPETITION RATE: 1.00/MIN 1.00/MIN
PROCESSOR MEMORY: PROGRAM SIZE: 40.00 KBYTES 50.00 KBYTES
DATA REQUIREMENT: 100.00 KBYTES 120.00 KBYTES
DATA STORAGE: SECONDARY: 150.00 KBYTES 170.00 KBYTES

PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS
ARCHIVAL: 100.00 KBYTES 120.00 KBYTES

20-JUL-1985

SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 3.2.5P NAME: RESOLVE CONFLICTS

DATA SOURCES:

METHODOLOGY: CRSS + EXPERIENCE

RESPONSE TIME: I/O DELAY ALLOWABLE:

30000.00 msec

COMMAND/CONTROL: LEVEL: I

LOCATION: N

RATE:

0.05

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1000.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G

PHYSICAL LOCATION CODE: T

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER:

O INTERVAL:

0.00 SEC

3

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 20.00 KIPC 25.00 KIPC 1.00/MIN REPETITION RATE: 1.00/MIN PROCESSOR MEMORY: PROGRAM SIZE: 40.00 KBYTES 50.00 KBYTES DATA REQUIREMENT: 120.00 KBYTES 170.00 KBYTES DATA STORAGE: SECONDARY: 150.00 KBYTES 200.00 KBYTES 0.00% IN 0.00HRS 0.00% IN 0.00HRS PERISHABILITY: ARCHIVAL: 100.00 KBYTES 120.00 KBYTES

FUNCTION NO: 3.2.6 NAME: MAINTAIN SHORT TERM SCHEDULES

DATA SOURCES:

METHODOLOGY: CRSS + EXPERIENCE

RESPONSE TIME: I/O DELAY ALLOWABLE:

30000.00 msec

LOCATION: N RATE: 0.05 COMMAND/CONTROL: LEVEL: I

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1000.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: N PHYSICAL LOCATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 36.00 KIPC 40.00 KIPC REPETITION RATE: 1.00/MIN 1.00/MIN PROCESSOR MEMORY: PROGRAM SIZE: 80.00 KEYTES 72.00 KBYTES DATA REQUIREMENT: DATA STORAGE: SECONDARY: 205.00 KBYTES 300.00 KBYTES 230.00 KBYTES 340.00 KEYTES

PERISHABILITY: 10.00% IN 336.00HRS 10.00% IN 336.00HRS ARCHIVAL: 400.00 KEYTES 500.00 KEYTES

\* OF DISPLAYS: 5

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 3.2.6P NAME: MAINTAIN SHORT TERM SCHEDULES

DATA SOURCES:

METHODOLOGY: CRSS + EXPERIENCE

RESPONSE TIME: I/O DELAY ALLOWABLE: 30000.00 msec

COMMAND/CONTROL: LEVEL: I LOCATION: N RATE: 0.05

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1000.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: N PHYSICAL LOCATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH 20.00 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 25.00 KIPC

REPETITION RATE: 40.00 KBYTES 100.00 KBYTES 150.00 KBYTES 00% IN 336 1.00/MIN 1.00/MIN PROCESSOR MEMORY: PROGRAM SIZE: 50.00 KBYTES 120.00 KBYTES

DATA REQUIREMENT:
DATA STORAGE: SECONDARY:
PERISHABILITY:
ARCHIVAL: 170.00 KBYTES 10.00% IN 336.00HRS 10.00% IN 336.00HRS

300.00 KBYTES 400.00 KBYTES \* OF DISPLAYS: 5

FUNCTION NO: 3.3.1 NAME: TIME TAG OPERATIONS

DATA SOURCES:

METHODOLOGY: EXPERIENCE

RESPONSE TIME: I/O DELAY ALLOWABLE:

30000.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: N RATE: 0.05

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1000.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: N PHYSICA

PHYSICAL LOCATION CODE: D

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOG GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 30.00 KIPC 40.00 KIPC REPETITION RATE: 1.00/MIN 1.00/MIN PROCESSOR MEMORY: PROGRAM SIZE: 70.00 KBYTES 80.00 KBYTES 100.00 KBYTES 200.00 KBYTES DATA REQUIREMENT:
DATA STORAGE: SECONDARY: 130.00 KBYTES 240.00 KBYTES

PERISHABILITY: 10.00% IN 336.00HRS 10.00% IN 336.00HRS
ARCHIVAL: 300.00 KBYTES 350.00 KBYTES

\* OF DISPLAYS: 5

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 3.3.1P NAME: TIME TAG OPERATIONS

DATA SOURCES:

METHODOLOGY: EXPERIENCE

RESPONSE TIME: I/O DELAY ALLOWABLE: 30000.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: N RATE: 0.05

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1000.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: N PHYSICAL LOCATION CODE: D

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH
DATA PROCESSING INSTRUCTIONS PER CYCLE: 10.00 KIPC 15.00 KIPC
REPETITION RATE: 1.00/MIN 1.00/MIN

PROCESSOR MEMORY: PROGRAM SIZE: 30.00 KEYTES 50.00 KEYTES
DATA REQUIREMENT: 50.00 KEYTES 60.00 KEYTES

DATA STORAGE: SECONDARY: 100.00 KBYTES 150.00 KBYTES
PERISHABILITY: 10.00% IN 336.00HRS 10.00% IN 336.00HRS
ARCHIVAL: 300.00 KBYTES 350.00 KBYTES

FUNCTION NO: 3.3.2 NAME: CHECK SCHEDULE CONFLICTS

DATA SOURCES:

METHODOLOGY: CRSS + EXPERIENCE

RESPONSE TIME: I/O DELAY ALLOWABLE:

30000.00 msec

LOCATION: RATE: 0.05 COMMAND/CONTROL: LEVEL: A

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1000.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: N PHYSICAL LOCATION CODE: D

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

IOC REQUIREMENTS: GROWTH 36.00 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 40.00 KIPC REPETITION RATE: 1.00/MIN 1.00/MIN PROCESSOR MEMORY: PROGRAM SIZE: 72.00 KEYTES 80.00 KEYTES DATA REQUIREMENT:
DATA STORAGE: SECONDARY:
PERISHABILITY:
ARCHIVAL: 205.00 KBYTES 250.00 KBYTES 300.00 KBYTES 340.00 KBYTES 10.00% IN 336.00HRS 10.00% IN 336.00HRS

400.00 KEYTES 500.00 KEYTES

\* OF DISPLAYS: 5 6

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 3.3.2P NAME: CHECK SCHEDULE CONFLICTS

DATA SOURCES:

METHODOLOGY: CRSS + EXPERIENCE

RESPONSE TIME: I/O DELAY ALLOWABLE: 30000.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: RATE: 0.05

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1000.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: N PHYSICAL LOCATION CODE: D

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH 30.00 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 35.00 KIPC REPETITION RATE: 1.00/MIN 1.00/MIN

PROCESSOR MEMORY: PROGRAM SIZE: 60.00 KBYTES OR MEMORI: PROGRAM DIZZ.

DATA REQUIREMENT:
DATA STORAGE: SECONDARY:
PERISHABILITY: 70.00 KBYTES 150.00 KEYTES 100.00 KBYTES 120.00 KBYTES

175.00 KBYTES 10.00% IN 336.00HRS 10.00% IN 336.00HRS ARCHIVAL: 100.00 KEYTES 200.00 KEYTES

FUNCTION NO: 3.3.3 NAME: MAINTAIN OPERATING EVENTS SCHEDULE

DATA SOURCES:

METHODOLOGY: EXPERIENCE

RESPONSE TIME: I/O DELAY ALLOWABLE:

30000.00 msec

COMMAND/CONTROL: LEVEL: I LOCATION: N RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1000.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: N

PHYSICAL LOCATION CODE: T

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 36.00 KIPC 40.00 KIPC PROCESSING INSTRUCTIONS FER CICLE:

REPETITION RATE:

1.00/MIN

1.00/MIN

1.00/MIN

PROCESSOR MEMORY: PROGRAM SIZE:

DATA REQUIREMENT:

DATA STORAGE: SECONDARY:

PERISHABILITY:

ARCHIVAL:

ARCHIVAL:

400.00 KBYTES

500.00 KBYTES

500.00 KBYTES

500.00 KBYTES

\* OF DISPLAYS: 5 6

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 3.3.3P NAME: MAINTAIN OPERATING EVENTS SCHEDULE

DATA SOURCES:

METHODOLOGY: EXPERIENCE

30000.00 msec RESPONSE TIME: I/O DELAY ALLOWABLE:

COMMAND/CONTROL: LEVEL: I LOCATION: N RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1000.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: N PHYSICAL LOCATION CODE: T

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH 36.00 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 40.00 KIPC

REPETITION RATE:

1.00/MIN

30.00 KBYTES

230.00 KBYTES

340.00 KBYTES

PERISHABILITY:
10.00% IN 336.00HRS

ARCHIVAL:
400.00 KBYTES

500.00 KBYTES PROCESSOR MEMORY: PROGRAM SIZE:

FUNCTION NO: 3.3.4 NAME: ADJUST FOR UNSCHEDULED MODE CHANGES

DATA SOURCES:

METHODOLOGY: EXPERIENCE

RESPONSE TIME: I/O DELAY ALLOWABLE:

30000.00 msec

COMMAND/CONTROL: LEVEL: I LOCATION: N RATE: 0.05

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1000.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: N

PHYSICAL LOCATION CODE: D

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

IOC REQUIREMENTS: GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 36.00 KIPC 40.00 KIPC REPETITION RATE: 1.00/MIN 1.00/MIN PROCESSOR MEMORY: PROGRAM SIZE:

72.00 KBYTES 80.00 KBYTES DATA REQUIREMENT: 205.00 KBYTES 230.00 KBYTES 300.00 KBYTES DATA STORAGE: SECONDARY: 340.00 KBYTES

PERISHABILITY: ARCHIVAL: 10.00% IN 336.00HRS 10.00% IN 336.00HRS 400.00 KEYTES 500.00 KBYTES

\* OF DISPLAYS: 5 6

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 3.3.4P NAME: ADJUST FOR UNSCHEDULED MODE CHANGES

DATA SOURCES:

METHODOLOGY: EXPERIENCE

30000.00 msec RESPONSE TIME: I/O DELAY ALLOWABLE:

COMMAND/CONTROL: LEVEL: I LOCATION: N RATE: 0.05

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1000.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: N PHYSICAL LOCATION CODE: D

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

IOC REQUIREMENTS: GROWTH 20.00 KIPC 28.00 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE:

10.00/HR REPETITION RATE: 10.00/HR PROCESSOR MEMORY: PROGRAM SIZE: 50.00 KBYTES 65.00 KBYTES

100.00 KBYTES DATA REQUIREMENT: 120.00 KBYTES DATA STORAGE: SECONDARY:
PERISHABILITY:
ARCHIVAL: 150.00 KBYTES 170.00 KBYTES

10.00% IN 336.00HRS 10.00% IN 336.00HRS 200.00 KBYTES 250.00 KBYTES

FUNCTION NO: 3.4.1 NAME: SEQUENCE PAYLOAD OPERATIONS

DATA SOURCES: Engineering Estimate

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE: 1.00 msec

LOCATION: I RATE: 0.00 COMMAND/CONTROL: LEVEL: A

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.01 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 0 INTERVAL: 1.00 SEC

IOC · REQUIREMENTS: GROWTH 0.20 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.10 KIPC REPETITION RATE: 1.00/MIN 1.00/MIN PROCESSOR MEMORY: PROGRAM SIZE: 1.00 KEYTES 2.00 KBYTES 1.00 KEYTES 2.00 KBYTES 0.00 KBYTES DATA REQUIREMENT: DATA STORAGE: SECONDARY: O.OO KEYTES PERISHABILITY: ARCHIVAL: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

0.00 KEYTES 0.00 KBYTES \* OF DISPLAYS: 1 1

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 3.4.1P NAME: SEQUENCE PAYLOAD OPERATIONS

DATA SOURCES: Engineering Estimate

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE: 50.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: I RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.01 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: I NUMBER: O INTERVAL: 1.00 SEC

IOC REQUIREMENTS: GROWTH 1.00 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 2.00 KIPC

6.00/MIN REPETITION RATE: 6.00/MIN . PROCESSOR MEMORY: PROGRAM SIZE: 10.00 KBYTES 20.00 KBYTES DATA REQUIREMENT:

5.00 KEYTES 8.00 KEYTES DATA STORAGE: SECONDARY:
PERISHABILITY:
ARCHIVAL: 0.00 KBYTES 0.00 KBYTES

0.00% IN 0.00HRS 0.00% IN 0.00HRS 0.00 KBYTES 0.00 KBYTES

FUNCTION NO: 3.4.2 NAME: SEQUENCE CORE SYSTEM OPERATIONS

DATA SOURCES: Engineering Estimate

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE: 1.00 msec

RATE: 0.00 COMMAND/CONTROL: LEVEL: A LOCATION: I

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.01 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: O INTERVAL: 1.00 SEC

IOC REQUIREMENTS: GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.10 KIPC 0.20 KIPC REPETITION RATE: 1.00/MIN 1.00/MIN PROCESSOR MEMORY: PROGRAM SIZE: 1.00 KBYTES 2.00 KBYTES DATA REQUIREMENT: 1.00 KBYTES 2.00 KBYTES DATA STORAGE: SECONDARY: 0.00 KEYTES 0.00 KBYTES 0.00% IN 0.00HRS 0.00% IN 0.00HRS PERISHABILITY:

0.00 KEYTES ARCHIVAL: O.OO KEYTES

\* OF DISPLAYS: 1 1

SSDS FUNCTIONAL DATA SHEET 20-JUL-1985

FUNCTION NO: 3.4.2P NAME: SEQUENCE CORE SYSTEM OPERATIONS

DATA SOURCES: Engineering Estimate

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE: 1.00 msec

LOCATION: I RATE: 0.00 COMMAND/CONTROL: LEVEL: A

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.01 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: O INTERVAL: 1.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 1.00 KIPC 2.00 KIPC 6.00/MIN REPETITION RATE: 6.00/MIN

PROCESSOR MEMORY: PROGRAM SIZE: 20.00 KBYTES 10.00 KEYTES DATA REQUIREMENT: 5.00 KBYTES 8.00 KBYTES 0.00 KEYTES DATA STORAGE: SECONDARY: 0.00 KBYTES

PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS ARCHIVAL: O.OO KBYTES 0.00 KEYTES

20-JUL-1985

SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 3.4.3 NAME: COMMAND SCHEDULED MODE CHANGE

DATA SOURCES: Engineering Estimate

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE:

1.00 msec

COMMAND/CONTROL: LEVEL: A

LOCATION: I RATE:

0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.01 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I

PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 0 INTERVAL: 1.00 SEC

IOC 1.00 KIPC REQUIREMENTS: GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 2.00 KIPC REPETITION RATE: 12.00/HR 12.00/HR PROCESSOR MEMORY: PROGRAM SIZE: 10.00 KBYTES 15.00 KBYTES 10.00 KBYTES DATA REQUIREMENT: 15.00 KBYTES DATA STORAGE: SECONDARY: 0.00 KEYTES 0.00 KBYTES PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

ARCHIVAL: 0.00 KEYTES 0.00 KEYTES

\* OF DISPLAYS: 1

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 3.4.3P NAME: COMMAND SCHEDULED MODE CHANGE

DATA SOURCES: Engineering Estimate

**METHODOLOGY:** 

RESPONSE TIME: I/O DELAY ALLOWABLE: 1.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: I RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.01 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 0 INTERVAL: 1.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 1.00 KIPC 2.00 KIPC

REPETITION RATE: 12.00/HR 12.00/HR PROCESSOR MEMORY: PROGRAM SIZE: 10.00 KBYTES 15.00 KBYTES

DATA REQUIREMENT: 10.00 KEYTES 15.00 KEYTES
DATA STORAGE: SECONDARY: 0.00 KEYTES 0.00 KEYTES

PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS
ARCHIVAL: 0.00 KEYTES 0.00 KEYTES

FUNCTION NO: 3.4.4 NAME: CHECK FOR EXECUTABILITY

DATA SOURCES:

**METHODOLOGY:** 

RESPONSE TIME: I/O DELAY ALLOWABLE: 1000.00 msec

LOCATION: RATE: 0.00 COMMAND/CONTROL: LEVEL:

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

PHYSICAL LOCATION CODE: SYSTEM DEPENDENCY CODE:

DIAGNOSTICS/SELF TEST: REQUIRED: NUMBER: O INTERVAL: 0.00 SEC

IOC REQUIREMENTS: GROWTH 15.00 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 20.00 KIPC REPETITION RATE: 6.00/MIN 10.00/MIN 30.00 KBYTES PROCESSOR MEMORY: PROGRAM SIZE: 40.00 KBYTES DATA REQUIREMENT:
DATA STORAGE: SECONDARY:
PERISHABILITY:
ARCHIVAL: 6.00 KBYTES 40.00 KBYTES 10.00 KEYTES 60.00 KBYTES

0.00% IN 0.00HRS 0.00% IN 0.00HRS 0.00 KBYTES 0.00 KBYTES # OF DISPLAYS: 2 3

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 3.4.4P NAME: CHECK FOR EXECUTABILITY

DATA SOURCES:

METHODOLOGY:

1000.00 msec RESPONSE TIME: I/O DELAY ALLOWABLE:

COMMAND/CONTROL: LEVEL: LOCATION: RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: PHYSICAL LOCATION CODE:

DIAGNOSTICS/SELF TEST: REQUIRED: NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH 10.00 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 15.00 KIPC

REPETITION RATE: 6.00/MIN 10.00/MIN PROCESSOR MEMORY: PROGRAM SIZE: 20.00 KBYTES 30.00 KBYTES

4.00 KBYTES DATA REQUIREMENT: 6.00 KEYTES DATA STORAGE: SECONDARY: 30.00 KBYTES 40.00 KBYTES

PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS 0.00 KBYTES ARCHIVAL: 0.00 KBYTES

SSDS FUNCTIONAL DATA SHEET 24-1111-1985

FUNCTION NO: 4.1.1.1 NAME: SPACE CRAFT STATE/ORBIT DETERMINATION

DATA SOURCES: SHUTTLE ONBOARD SOFTWARE SIZING # LOADING DATA BASE

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE: 500.00 msec

RATE: 0.00 COMMAND/CONTROL: LEVEL: A LOCATION: I

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: PHYSICAL LOCATION CODE: D

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

IOC GROWTH REQUIREMENTS: 20.00 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 22.00 KIPC REPETITION RATE: 1.00/S 1.00/S

PROCESSOR MEMORY: PROGRAM SIZE: 20.00 KBYTES 30.00 KBYTES 15.00 KBYTES 17.00 KBYTES 70.00 KBYTES 100.00 KBYTES DATA REQUIREMENT:

DATA STORAGE: SECONDARY:
PERISHABILITY:
ARCHIVAL: 1.00% IN 0.25HRS 1.00% IN 0.25HRS 0.00 KBYTES 0.00 KBYTES

\* OF DISPLAYS: 0 0

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.1.1.1PNAME: SPACE CRAFT STATE/ORBIT DETERMINATION

DATA SOURCES: SHUTTLE ONBOARD SOFTWARE SIZING & LOADING DATA BASE

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE: 500.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: I RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: PHYSICAL LOCATION CODE: D

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH

10.00 KIPC : DATA PROCESSING INSTRUCTIONS PER CYCLE: 11.00 KIPC REPETITION RATE: 1.00/S 1.00/5 PROCESSOR MEMORY: PROGRAM SIZE:

20.00 KEYTES 30.00 KBYTES DATA REQUIREMENT: 15.00 KBYTES 18.00 KBYTES 17.00 KBYTES

DATA REQUIREMENTS
DATA STORAGE: SECONDARY:
PERISHABILITY: 9.00 KBYTES 1.00% IN 0.25HRS 1.00% IN 0.25HRS ARCHIVAL:

0.00 KBYTES 0.00 KBYTES \* OF DISPLAYS: Ω 0

FUNCTION NO: 4.1.1.2 NAME: CONSTELLATION STATE/ORBIT DETERMINATION

DATA SOURCES:

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE:

500.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: I

RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G

PHYSICAL LOCATION CODE: D

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: 0 INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 50.00 KIPC 100.00 KIPC 0.25/\$ 0.25/S REPETITION RATE: PROCESSOR MEMORY: PROGRAM SIZE: 50.00 KBYTES 75.00 KBYTES DATA REQUIREMENT: 40.00 KBYTES 80.00 KBYTES DATA STORAGE: SECONDARY: 300.00 KBYTES

ATA STORAGE: SECONDARY: 200.00 KBYTES 300.00 KBYTES
PERISHABILITY: 2.00% IN 0.25HRS 2.00% IN 0.25HRS
ARCHIVAL: 0.00 KBYTES 0.00 KBYTES

 **OF DISPLAYS:** 0 0

FUNCTION NO: 4.1.1.3 NAME: DETERMINE EPHEMERIDES (SUN, MOON, ETC.)

DATA SOURCES:

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE: 0.00 msec

RATE: 0.00 COMMAND/CONTROL: LEVEL: A LOCATION:

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: PHYSICAL LOCATION CODE:

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

IOC REQUIREMENTS: GROWTH 1.00 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 1.00 KIPC 1.00/MN REPETITION RATE: 1.00/MN PROCESSOR MEMORY: PROGRAM SIZE: 2.00 KBYTES 3.50 KBYTES 4.00 KBYTES DATA REQUIREMENT: 5.00 KBYTES DATA STORAGE: SECONDARY: 4.00 KBYTES

4.00 KBYTES PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS 0.00 KBYTES ARCHIVAL: O.OO KBYTES

\* OF DISPLAYS: 0 0

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.1.1.3PNAME: DETERMINE EPHEMERIDES (SUN, MOON, ETC.)

DATA SOURCES:

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE: 0.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: PHYSICAL LOCATION CODE:

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

IOC REQUIREMENTS: GROWTH 1.00 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 1.00 KIPC

REPETITION RATE: 1.00/MN 1.00/MN 2.00 KBYTES PROCESSOR MEMORY: PROGRAM SIZE: 3.50 KBYTES 4.00 KBYTES 5.00 KBYTES DATA REQUIREMENT:

DATA STORAGE: SECONDARY:
PERISHABILITY: 4.00 KBYTES 4.00 KBYTES

PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS 0.00 KEYTES 0.00 KEYTES ARCHIVAL:

FUNCTION NO: 4.1.1.4 NAME: ATTITUDE DETERMINATION

DATA SOURCES:

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE: 500.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: PHYSICAL LOCATION CODE:

DIAGNOSTICS/SELF TEST: REQUIRED: NUMBER: O INTERVAL: 0.00 SEC

IOC REQUIREMENTS: GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 10.00 KIPC 10.00 KIPC REPETITION RATE: 1.00/S 1.00/S PROCESSOR MEMORY: PROGRAM SIZE:

1.00/S 1.00/S 53.00 KBYTES 60.00 KBYTES 22.00 KBYTES 106.00 KBYTES 106.00 KBYTES DATA REQUIREMENT:
DATA STORAGE: SECONDARY:
PERISHABILITY:
ARCHIVAL:

1.00% IN 0.25HRS 1.00% IN 0.00HRS 0.00 KEYTES 0.00 KEYTES

\* OF DISPLAYS: 0 0

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.1.1.4PNAME: ATTITUDE DETERMINATION

DATA SOURCES:

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE: 500.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: PHYSICAL LOCATION CODE:

DIAGNOSTICS/SELF TEST: REQUIRED: NUMBER: 0 INTERVAL: 0.00 SEC

REQUIREMENTS: GROWTH

IOC 5.00 KIPC 1.00/S DATA PROCESSING INSTRUCTIONS PER CYCLE: 7.00 KIPC REPETITION RATE: 1.00/S

PROCESSOR MEMORY: PROGRAM SIZE: **42.00 KBYTES** DATA REQUIREMENT: 16.00 KBYTES

55.00 KBYTES 14.00 KBYTES 10.00 KBYTES DATA STORAGE: SECONDARY:
PERISHABILITY:
ARCHIVAL: 15.00 KBYTES

1.00% IN 0.25HRS 1.00% IN 0.00HRS 0.00 KBYTES 0.00 KBYTES

FUNCTION NO: 4.1.1.5 NAME: NAVIGATION STATE PROPAGATION

DATA SOURCES:

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE: 500.00 msec

\ LOCATION: RATE: 0.00 COMMAND/CONTROL: LEVEL: A

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: PHYSICAL LOCATION CODE:

DIAGNOSTICS/SELF TEST: REQUIRED: NUMBER: O INTERVAL: 0.00 SEC

IOC REQUIREMENTS: GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 10.00 KIPC 11.00 KIPC REPETITION RATE: 0.50/S 0.50/S

PROCESSOR MEMORY: PROGRAM SIZE: 20.00 KBYTES 25.00 KBYTES DATA REQUIREMENT:

4.00 KBYTES 5.00 KBYTES 40.00 KBYTES 40.00 KBYTES DATA STORAGE: SECONDARY:
PERISHABILITY:
ARCHIVAL:

1.00% IN 0.25HRS 1.00% IN 0.25HRS 0.00 KBYTES 0.00 KBYTES

OF DISPLAYS: 0 0

SSDS FUNCTIONAL DATA SHEET 20-JUL-1985

FUNCTION NO: 4.1.1.5PNAME: NAVIGATION STATE PROPAGATION

DATA SOURCES:

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE: 500.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: PHYSICAL LOCATION CODE:

DIAGNOSTICS/SELF TEST: REQUIRED: NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH 10.00 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 11.00 KIPC

REPETITION RATE: 0.50/S 0.50/S PROCESSOR MEMORY: PROGRAM SIZE: 20.00 KBYTES 25.00 KBYTES

DATA REQUIREMENT:
DATA STORAGE: SECONDARY:
PERISHABILITY:
ARCHIVAL: 4.00 KBYTES 40.00 KBYTES 5.00 KBYTES 40.00 KBYTES

1.00% IN 0.25HRS 1.00% IN 0.25HRS 0.00 KBYTES 0.00 KBYTES

FUNCTION NO: 4.1.1.6 NAME: DEVICE MANAGEMENT

DATA SOURCES:

METHODOLOGY:

2000.00 msec RESPONSE TIME: I/O DELAY ALLOWABLE:

LOCATION: RATE: 0.00 COMMAND/CONTROL: LEVEL: A

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: PHYSICAL LOCATION CODE:

DIAGNOSTICS/SELF TEST: REQUIRED: NUMBER: O INTERVAL: 0.00 SEC

IOC REQUIREMENTS: GROWTH 15.00 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 20.00 KIPC REPETITION RATE: 1.00/S 1.00/S

PROCESSOR MEMORY: PROGRAM SIZE: 30.00 KBYTES 40.00 KBYTES DATA REQUIREMENT: 

DATA STORAGE: SECONDARY:
PERISHABILITY:
ARCHIVAL: 0.00% IN 0.00HRS 0.00% IN 0.00HRS 0.00 KBYTES 0.00 KBYTES

OF DISPLAYS: 0 0

SSDS FUNCTIONAL DATA SHEET 20-JUL-1985

FUNCTION NO: 4.1.1.6PNAME: DEVICE MANAGEMENT

DATA SOURCES:

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE: 2000.00 msec

' LOCATION: RATE: 0.00 COMMAND/CONTROL: LEVEL: A

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: PHYSICAL LOCATION CODE:

DIAGNOSTICS/SELF TEST: REQUIRED: NUMBER: O INTERVAL: 0.00 SEC

IOC REQUIREMENTS: GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 10.00 KIPC 12.00 KIPC 1.00/S

REPETITION RATE: 1.00/S PROCESSOR MEMORY: PROGRAM SIZE: 20.00 KBYTES 25.00 KBYTES

15.00 KBYTES 20.00 KBYTES 40.00 KBYTES 60.00 KBYTES DATA REQUIREMENT:

DATA STORAGE: SECONDARY:
PERISHABILITY:
ARCHIVAL: 0.00% IN 0.00HRS 0.00% IN 0.00HRS 0.00 KBYTES 0.00 KBYTES

FUNCTION NO: 4.1.1.7 NAME: COMMAND INTERFACE PROCESSING

DATA SOURCES:

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE:

1000.00 msec

COMMAND/CONTROL: LEVEL: I LOCATION: RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE:

PHYSICAL LOCATION CODE:

NUMBER: O INTERVAL: 0.00 SEC DIAGNOSTICS/SELF TEST: REQUIRED:

IOG 8.00 KIPG 0.50/S REQUIREMENTS: GROWTH INSTRUCTIONS PER CICLE.

REPETITION RATE: 0.50/S

T: PROGRAM SIZE: 10.00 KEYTES 12.00 KEYTES

DATA REQUIREMENT: 8.00 KEYTES 9.00 KEYTES

PRAGE: SECONDARY: 20.00 KEYTES 25.00 KEYTES

DEPTISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

O OO KEYTES 0.00 KEYTES DATA PROCESSING INSTRUCTIONS PER CYCLE: 10.00 KIPC PROCESSOR MEMORY: PROGRAM SIZE:

DATA REQUIREMENT: DATA STORAGE: SECONDARY:

# OF DISPLAYS: 5 5

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.1.1.7PNAME: COMMAND INTERFACE PROCESSING

DATA SOURCES:

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE: 1000.00 msec

COMMAND/CONTROL: LEVEL: I LOCATION: RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: PHYSICAL LOCATION CODE:

DIAGNOSTICS/SELF TEST: REQUIRED: NUMBER: O INTERVAL: O.CO SEC

REQUIREMENTS: IOC GROWTH 4.00 KIPC 6.00 KIPC
0.50/S 0.50/S
5.00 KBYTES 6.00 KBYTES
4.00 KBYTES 5.00 KBYTES
10.00 KBYTES 15.00 KBYTES DATA PROCESSING INSTRUCTIONS PER CYCLE: REPETITION RATE:

PROCESSOR MEMORY: PROGRAM SIZE: DATA REQUIREMENT: DATA STORAGE: SECONDARY:

PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS ARCHIVAL: 0.00 KBYTES 0.00 KBYTES

FUNCTION NO: 4.1.2.1 NAME: REBOOST/REENTRY TARGETING

DATA SOURCES:

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE: 500.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: PHYSICAL LOCATION CODE:

DIAGNOSTICS/SELF TEST: REQUIRED: NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOG GROWTH 2.00 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 2.50 KIPC REPETITION RATE: 1.00/S 1.00/S

PROCESSOR MEMORY: PROGRAM SIZE: 20.00 KEYTES 25.00 KBYTES 5.00 KEYTES 40.00 KEYTES DATA REQUIREMENT:
DATA STORAGE: SECONDARY: 6.00 KBYTES

40.00 KBYTES PERISHABILITY: ARCHIVAL: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

0.00 KBYTES 0.00 KEYTES \* OF DISPLAYS: 0 0

SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.1.2.1PNAME: REBOOST/REENTRY TARGETING

DATA SOURCES:

20-JUL-1985

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE: 500.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: PHYSICAL LOCATION CODE:

DIAGNOSTICS/SELF TEST: REQUIRED: NUMBER: O INTERVAL: 0.00 SEC

IOC . REQUIREMENTS: GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 1.40 KIPC 2.00 KIPC REPETITION RATE: 1.00/S 1.00/S

PROCESSOR MEMORY: PROGRAM SIZE: 14.00 KBYTES 18.00 KBYTES DATA REQUIREMENT: DATA STORAGE: SECONDARY: 3.50 KBYTES 4.50 KBYTES 28.00 KBYTES

30.00 KBYTES PERISHABILITY:
ARCHIVAL: 0.00% IN 0.00HRS 0.00% IN 0.00HRS O.OO KBYTES

0.00 KEYTES \* OF DISPLAYS: 0 ٥

FUNCTION NO: 4.1.2.2 NAME: MANEUVER COORDINATION

DATA SOURCES:

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE:

1000.00 msec

LOCATION: RATE: 0.00 COMMAND/CONTROL: LEVEL: A

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE:

PHYSICAL LOCATION CODE:

DIAGNOSTICS/SELF TEST: REQUIRED: NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH

DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.50 KIPC 0.90 KIPC

REPETITION RATE: 1.00/S 1.00/S

PROCESSOR MEMORY: PROGRAM SIZE: 18.00 KEYTES 30.00 KEYTES

DATA REQUIREMENT: 12.00 KEYTES 20.00 KEYTES

DATA STORAGE: SECONDARY: 36.00 KEYTES 45.00 KEYTES

PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

ARCHIVAL: 0.00 KEYTES

PERISHABILITY: ARCHIVAL:

0.00 KBYTES 0.00 KBYTES \* OF DISPLAYS: 0 0

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.1.2.2PNAME: MANEUVER COORDINATION

DATA SOURCES:

**METHODOLOGY:** 

RESPONSE TIME: I/O DELAY ALLOWABLE: 1000.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: PHYSICAL LOCATION CODE:

DIAGNOSTICS/SELF TEST: REQUIRED: NUMBER: O INTERVAL: 0.00 SEC

DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.35 KIPC REPETITION RATE: 1.00/S GROWTH 0.60 KIPC 1.00/5

DATA PROCESSING INSTRUCTIONS PER GIGHE.

REPETITION RATE:

PROCESSOR MEMORY: PROGRAM SIZE:

DATA REQUIREMENT:

DATA STORAGE: SECONDARY:

PERISHABILITY:

ARCHIVAL: 1.00/S 1.00/S
12.00 KBYTES 20.00 KBYTES
8.00 KBYTES 12.00 KBYTES
24.00 KBYTES 40.00 KBYTES

8.00 KBYTES 12.00 KBYTES 24.00 KBYTES 40.00 KBYTES 0.00% IN 0.00HRS 0.00% IN 0.00HRS . 0.00 KBYTES 0.00 KBYTES

20-JUL-1985

SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.1.2.3 NAME: COLLISION CHECK

DATA SOURCES:

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE:

0.00 msec

COMMAND/CONTROL: LEVEL: A

LOCATION:

RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE:

0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE:

PHYSICAL LOCATION CODE:

DIAGNOSTICS/SELF TEST: REQUIRED:

NUMBER: O INTERVAL:

0.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 10.00 KIPC 12.00 KIPC REPETITION RATE: 5.00/MN 5.00/MN PROCESSOR MEMORY: PROGRAM SIZE: 20.00 KEYTES 25.00 KBYTES DATA REQUIREMENT: 10.00 KEYTES 12.00 KBYTES DATA STORAGE: SECONDARY: 40.00 KBYTES 40.00 KBYTES PERISHABILITY: 1.00% IN 1.00HRS 1.00% IN 1.00HRS ARCHIVAL: 0.00 KBYTES

\* OF DISPLAYS:

0

0.00 KBYTES

FUNCTION NO: 4.1.2.4 NAME: REBOOST MANEUVER

DATA SOURCES:

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE:

250.00 msec

250.00 msec

COMMAND/CONTROL: LEVEL: A

LOCATION: RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE:

PHYSICAL LOCATION CODE:

DIAGNOSTICS/SELF TEST: REQUIRED: NUMBER: O INTERVAL: 0.00 SEC

IOC REQUIREMENTS: GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 5.00 KIPC 1.00/S 6.00 KIPC REPETITION RATE:

1.00/S PROCESSOR MEMORY: PROGRAM SIZE: 15.00 KBYTES

10.00 KBYTES 4.00 KBYTES 20.00 KBYTES DATA REQUIREMENT: 6.00 KEYTES DATA STORAGE: SECONDARY: 23.00 KBYTES

PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS ARCHIVAL: O.OO KEYTES 0.00 KBYTES

\* OF DISPLAYS: 0 0

20-JUL-1985

SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.1.2.4PNAME: REBOOST MANEUVER

DATA SOURCES:

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE:

LOCATION: COMMAND/CONTROL: LEVEL: A RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

PHYSICAL LOCATION CODE: SYSTEM DEPENDENCY CODE:

DIAGNOSTICS/SELF TEST: REQUIRED: NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH 3.50 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 4.50 KIPC REPETITION RATE: 1.00/5 1.00/S

7.00 KBYTES 2.80 KBYTES PROCESSOR MEMORY: PROGRAM SIZE: 10.00 KBYTES DATA REQUIREMENT: 3.20 KBYTES 2.80 KBYTES 3.20 KBYTES 18.00 KBYTES

DATA STORAGE: SECONDARY: PERISHABILITY: ARCHIVAL: 0.00% IN 0.00HRS 0.00% IN 0.00HRS 0.00 KBYTES 0.00 KBYTES

# OF DISPLAYS: Ω ٥

FUNCTION NO: 4.1.2.5 NAME: TETHER CONTROL

DATA SOURCES:

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE: 2000.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: PHYSICAL LOCATION CODE:

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH

DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.00 KIPC 1.00 KIPC

REPETITION RATE: 0.00/S 0.10/S

PROCESSOR MEMORY: PROGRAM SIZE: 0.00 KBYTES 15.00 KBYTES

DATA REQUIREMENT: 0.00 KBYTES 4.00 KBYTES
DATA STORAGE: SECONDARY: 0.00 KBYTES 30.00 KBYTES

PERISHABILITY: 0.00% IN 0.00HRS 1.00% IN 0.00HRS

ARCHIVAL: 0.00 KEYTES 0.00 KEYTES

• OF DISPLAYS: 0 0

G-81

FUNCTION NO: 4.1.2.6 NAME: DETERMINE POINTING MOUNT CONTROLS

DATA SOURCES:

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE: 0.00 msec

LOCATION: **RATE:** 0.00 COMMAND/CONTROL: LEVEL: A

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: PHYSICAL LOCATION CODE:

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

IOC REQUIREMENTS: GROWTH 1.50 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 2.00 KIPC REPETITION RATE: 1.00/S 1.00/S

PROCESSOR MEMORY: PROGRAM SIZE: 5.00 KBYTES 7.00 KBYTES DATA REQUIREMENT: 1.00 KEYTES 1.50 KBYTES

DATA STORAGE: SECONDARY: 10.00 KBYTES 12.00 KBYTES PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS 0.00 KEYTES

0.00 KBYTES ARCHIVAL: \* OF DISPLAYS: 0 0

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.1.2.6PNAME: DETERMINE POINTING MOUNT CONTROLS

DATA SOURCES:

**METHODOLOGY:** 

RESPONSE TIME: I/O DELAY ALLOWABLE: 0.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: PHYSICAL LOCATION CODE:

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH 0.75 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 1.00 KIPC

REPETITION RATE: 1.00/S 1.00/S PROCESSOR MEMORY: PROGRAM SIZE: 2.50 KBYTES 3.50 KBYTES DATA REQUIREMENT: 0.50 KBYTES 0.75 KBYTES

DATA STORAGE: SECONDARY: 5.00 KEYTES 6.00 KBYTES

PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS ARCHIVAL: 0.00 KBYTES O.OO KBYTES

FUNCTION NO: 4.1.2.7 NAME: DEVICE MANAGEMENT

DATA SOURCES:

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE: 0.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: PHYSICAL LOCATION CODE:

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

IOC REQUIREMENTS: GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 1.00 KIPC 1.00 KIPC 0.10/S REPETITION RATE: 0.10/S PROCESSOR MEMORY: PROGRAM SIZE: 4.00 KEYTES 5.00 KBYTES DATA REQUIREMENT: 1.00 KEYTES 2.00 KBYTES

DATA STORAGE: SECONDARY: 8.00 KEYTES 8.00 KBYTES PERISHABILITY: 1.00% IN 0.25HRS 1.00% IN 0.00HRS

ARCHIVAL: O.OO KEYTES 0.00 KBYTES \* OF DISPLAYS:

0 0

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.1.2.7PNAME: DEVICE MANAGEMENT

DATA SOURCES:

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE: 0.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: PHYSICAL LOCATION CODE:

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

IOC REQUIREMENTS: GROWTH 0.30 KIPC

DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.40 KIPC REPETITION RATE: 0.10/S 0.10/S

PROCESSOR MEMORY: PROGRAM SIZE: 1.20 KBYTES 1.50 KBYTES DATA REQUIREMENT: 0.30 KBYTES 0.60 KBYTES

DATA STORAGE: SECONDARY: 5.00 KBYTES 5.00 KEYTES

PERISHABILITY: 1.00% IN 0.25HRS 1.00% IN 0.00HRS ARCHIVAL: 0.00 KBYTES 0.00 KBYTES

# OF DISPLAYS: O 0

FUNCTION NO: 4.1.2.8 NAME: COMMAND INTERFACE PROCESSING

DATA SOURCES:

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE: 0.00 msec

LOCATION: RATE: 0.00 COMMAND/CONTROL: LEVEL: A

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: PHYSICAL LOCATION CODE:

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

IOC 5.00 KIPC 1.00/S REQUIREMENTS: GROWTH INSTRUCTIONS PER CLOSS.

REPETITION RATE: 1.00/S

I: PROGRAM SIZE: 20.00 KBYTES 25.00 KBYTES

DATA REQUIREMENT: 5.00 KBYTES 7.00 KBYTES

40.00 KBYTES 50.00 KBYTES

TWO ODORS 0.00% IN 0.00HRS DATA PROCESSING INSTRUCTIONS PER CYCLE:

PROCESSOR MEMORY: PROGRAM SIZE:

DATA REQUIREMENT: DATA STORAGE: SECONDARY:

40.00 KBYTES 7.00 KBYTES 40.00 KBYTES 50.00 KBYTES 0.00% IN 0.00HRS 0.00% IN 0.00HRS PERISHABILITY: ARCHIVAL: 0.00 KEYTES O.OO KEYTES

\* OF DISPLAYS: 10 10

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.1.2.8PNAME: COMMAND INTERFACE PROCESSING

DATA SOURCES:

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE: 0.00 msec

RATE: 0.00 COMMAND/CONTROL: LEVEL: A LOCATION:

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: PHYSICAL LOCATION CODE:

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

GROWTH REQUIREMENTS: IOC DATA PROCESSING INSTRUCTIONS PER CYCLE: 5.00 KIPC

4.00 KIPC REPETITION RATE: 1.00/S 1.00/S

6.00 KEYTES PROCESSOR MEMORY: PROGRAM SIZE: 7.00 KBYTES 1.50 KBYTES 2.00 KBYTES 10.00 KBYTES 13.00 KBYTES

DATA REQUIREMENT:
DATA STORAGE: SECONDARY:
PERISHABILITY:
ARCHIVAL: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

0.00 KBYTES 0.00 KBYTES

FUNCTION NO: 4.1.3.1 NAME: CONTROL ATTITUDE AND TRANSLATION

DATA SOURCES: SPACE SHUTTLE ORBITOR AVIONICS SOFTWARE MEMORY DATA BASE

METHODOLOGY: COMPLEXITY MATCHING WITH SIMILAR SUBFUNCTION

RESPONSE TIME: I/O DELAY ALLOWABLE: 200.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: O RATE: 2.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: S PHYSICAL LOCATION CODE: T

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 2 INTERVAL: 600,00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 30.00 KIPC 45.00 KIPC REPETITION RATE: 5.00/S 5.00/S

PROCESSOR MEMORY: PROGRAM SIZE: 48.00 KEYTES **56.20 KBYTES** DATA REQUIREMENT: 7.00 KBYTES 10.80 KBYTES

DATA STORAGE: SECONDARY: 57.60 KEYTES 57.60 KBYTES PERISHABILITY: 100.00% IN 720.00HRS100.00% IN 720.00HRS

ARCHIVAL: 29.20 KBYTES 29.20 KBYTES \* OF DISPLAYS: 3 4

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.1.3.1PNAME: CONTROL ATTITUDE AND TRANSLATION

DATA SOURCES: SPACE SHUTTLE ORBITOR AVIONICS SOFTWARE MEMORY DATA BASE

METHODOLOGY: COMPLEXITY MATCHING WITH SIMILAR SUBFUNCTION

RESPONSE TIME: I/O DELAY ALLOWABLE: 200.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: O RATE: 2.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: S PHYSICAL LOCATION CODE: T

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 2 INTERVAL: 600.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 25.00 KIPG 35.00 KIPC

REPETITION RATE: 5.00/S 5.00/S PROCESSOR MEMORY: PROGRAM SIZE: 48.00 KBYTES 56.20 KBYTES

7.00 KBYTES DATA REQUIREMENT: 10.80 KBYTES 57.60 KBYTES 57.60 KBYTES

DATA STORAGE: SECONDARY:
PERISHABILITY:
ARCHIVAL: 100.00% IN 720.00HRS100.00% IN 720.00HRS

.29.20 KBYTES 29.20 KBYTES \* OF DISPLAYS: 3

FUNCTION NO: 4.1.3.2 NAME: GENERATE ATTITUDE COMMANDS

DATA SOURCES: SPACE SHUTTLE ORBITOR AVIONICS SOFTWARE MEMORY DATABASE

METHODOLOGY: COMPLEXITY MATCHING PER SUBFUNCTION

RESPONSE TIME: I/O DELAY ALLOWABLE:

200.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: O RATE: 2.50

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: S PHYSICAL LOCATION CODE: T

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 3 INTERVAL: 300.00 SEC

REQUIREMENTS: IOC GROWTH
DATA PROCESSING INSTRUCTIONS PER CYCLE: 2.00 KIPC 2.50 KIPC
REPETITION RATE: 1.00/S 1.00/S
PROCESSOR MEMORY: PROGRAM SIZE: 20.00 KEYTES 22.00 KEYTES
DATA REQUIREMENT: 4.00 KEYTES 5.00 KEYTES

DATA STORAGE: SECONDARY: 240.00 KBYTES 240.00 KBYTES
PERISHABILITY: 100.00% IN 720.00HRS100.00% IN 720.00HRS
ARCHIVAL: 122.00 KBYTES 122.00 KBYTES

OF DISPLAYS: 3

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.1.3.2PNAME: GENERATE ATTITUDE COMMANDS

DATA SOURCES: SPACE SHUTTLE ORBITOR AVIONICS SOFTWARE MEMORY DATABASE

METHODOLOGY: COMPLEXITY MATCHING PER SUBFUNCTION

RESPONSE TIME: I/O DELAY ALLOWABLE: 200.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: O RATE: 2.50

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: S PHYSICAL LOCATION CODE: T

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 3 INTERVAL: 300.00 SEC

REQUIREMENTS: IOC GROWTH
DATA PROCESSING INSTRUCTIONS PER CYCLE: 2.00 KIPC 2.50 KIPC
REPETITION RATE: 1.00/S 1.00/S

PROCESSOR MEMORY: PROGRAM SIZE: 20.00 KEYTES 22.00 KEYTES
DATA REQUIREMENT: 4.00 KEYTES 5.00 KEYTES
DATA STORAGE: SECONDARY: 240.00 KEYTES 240.00 KEYTES

PERISHABILITY: 100.00% IN 720.00HRS100.00% IN 720.00HRS
ARCHIVAL: 122.00 KBYTES 122.00 KBYTES

FUNCTION NO: 4.1.3.3 NAME: MOMENTUM MANAGEMENT

DATA SOURCES: SPACE STATION ATTITUDE CONTROL SIMULATION

METHODOLOGY: ESTIMATE BASE ON COMPUTER SIMULATION.

RESPONSE TIME: I/O DELAY ALLOWABLE: 200.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: O RATE: 0.50

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH: 4.1.3.1 4.1.37

SYSTEM DEPENDENCY CODE: S PHYSICAL LOCATION CODE: T

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 1.50 KIPC 2.00 KIPC REPETITION RATE: 1.00/S 1.00/S

PROCESSOR MEMORY: PROGRAM SIZE: 14.00 KBYTES 16.00 KBYTES DATA REQUIREMENT: 1.80 KBYTES 1.40 KBYTES 2.00 KBYTES

DATA STORAGE: SECONDARY: 2.00 KBYTES PERISHABILITY: 100.00% IN 8.00HRS100.00% IN 8.00HRS

ARCHIVAL: 0.00 KEYTES 0.00 KEYTES \* OF DISPLAYS: 2 2

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.1.3.3PNAME: MOMENTUM MANAGEMENT

DATA SOURCES: SPACE STATION ATTITUDE CONTROL SIMULATION

METHODOLOGY: ESTIMATE BASE ON COMPUTER SIMULATION.

RESPONSE TIME: I/O DELAY ALLOWABLE: 200.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: O RATE: 0.50

DATA QUALITY: MAXIMUM BIT ERROR RATE:

SYNCHRONIZATION WITH: 4.1.3.1 4.1.37

SYSTEM DEPENDENCY CODE: S PHYSICAL LOCATION CODE: T

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: O INTERVAL: 0.00 SEC

IOC REQUIREMENTS: GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 1.50 KIPC . 2.00 KIPC

REPETITION RATE: 1.00/S 1.00/S PROCESSOR MEMORY: PROGRAM SIZE: 16.00 KBYTES 14.00 KBYTES

DATA REQUIREMENT: 1.80 KBYTES 2.00 KBYTES DATA STORAGE: SECONDARY: 1.40 KBYTES 2.00 KBYTES

PERISHABILITY: ARCHIVAL: 100.00% IN 8.00HRS100.00% IN 8.00HRS O.OO KEYTES O.OO KEYTES

SSDS FUNCTIONAL DATA SHEET 20-JUL-1985

FUNCTION NO: 4.1.3.4 NAME: POINTING MOUNT CONTROL

DATA SOURCES:

METHODOLOGY: ENGINEERING STUDY

RESPONSE TIME: I/O DELAY ALLOWABLE: 500.00 msec

LOCATION: O RATE: COMMAND/CONTROL: LEVEL: A 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: S PHYSICAL LOCATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: O INTERVAL: 0.50 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 5.00 KIPC 7.00 KIPC REPETITION RATE: 1.00/S 1.00/S PROCESSOR MEMORY: PROGRAM SIZE:

21.00 KBYTES 26.00 KBYTES DATA REQUIREMENT: DATA STORAGE: SECONDARY: 4.00 KBYTES 6.00 KBYTES

10.00 KBYTES 10.00 KBYTES PERISHABILITY: 20.00% IN 12.00HRS 20.00% IN 12.00HRS

ARCHIVAL: 50.00 KBYTES 50.00 KBYTES

\* OF DISPLAYS: 3 3

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.1.3.4PNAME: POINTING MOUNT CONTROL

DATA SOURCES:

METHODOLOGY: ENGINEERING STUDY

RESPONSE TIME: I/O DELAY ALLOWABLE: 500.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: O RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: S PHYSICAL LOCATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: O INTERVAL: 0.50 SEC

IOC 5.00 KIPC REQUIREMENTS: GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 7.00 KIPC 1.00/S REPETITION RATE:

1.00/S PROCESSOR MEMORY: PROGRAM SIZE: 21.00 KBYTES 26.00 KBYTES 4.00 KBYTES

DATA REQUIREMENT: 4.00 KBYTES 6.00 KBYTES

DATA STORAGE: SECONDARY: 10.00 KBYTES 10.00 KBYTES

PERISHABILITY: 20.00% IN 12.00HRS 20.00% IN 12.00HRS

ARCHIVAL: 50.00 KBYTES 50.00 KBYTES

SSDS FUNCTIONAL DATA SHEET 20-JUL-1985

FUNCTION NO: 4.1.3.5 NAME: DEVICE MANAGEMENT

DATA SOURCES:

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE:

0.00 msec

COMMAND/CONTROL: LEVEL: A

LOCATION: RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE:

PHYSICAL LOCATION CODE:

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC
DATA PROCESSING INSTRUCTIONS PER CYCLE: 10.00 KIPC GROWTH 12.00 KIPC

REPETITION RATE:
PROCESSOR MEMORY: PROGRAM SIZE: 0.50/S 0.50/S

15.00 KBYTES 4.00 KBYTES 30.00 KBYTES 20.00 KBYTES DATA REQUIREMENT: DATA STORAGE: SECONDARY: 6.00 KBYTES

4.00 KBYTES 6.00 KBYTES 30.00 KBYTES 30.00 KBYTES 1.00% IN 0.25HRS 1.00% IN 0.25HRS PERISHABILITY:

ARCHIVAL: 0.00 KBYTES 0.00 KETTES \* OF DISPLAYS: 1 1

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.1.3.5PNAME: DEVICE MANAGEMENT

DATA SOURCES:

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE: 0.00 msec

'COMMAND/CONTROL: LEVEL: A LOCATION: RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: PHYSICAL LOCATION CODE:

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH 5.00 KIPC .. 0.50/S DATA PROCESSING INSTRUCTIONS PER CYCLE: 6.00 KIPC REPETITION RATE: 0.50/S

10.00 KBYTES PROCESSOR MEMORY: PROGRAM SIZE: 15.00 KBYTES 4.00 KBYTES 15.00 KBYTES DATA REQUIREMENT: 6.00 KBYTES

DATA STORAGE: SECONDARY: 15.00 KBYTES PERISHABILITY: ARCHIVAL: 1.00% IN 0.25HRS 1.00% IN 0.25HRS

0.00 KEYTES 0.00 KEYTES \* OF DISPLAYS:

FUNCTION NO: 4.1.3.6 NAME: COMMAND INTERFACE PROCESSING

DATA SOURCES:

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE: 0.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: PHYSICAL LOCATION CODE:

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH

DATA PROCESSING INSTRUCTIONS PER CYCLE: 12.00 KIPC 13.00 KIPC REPETITION RATE: 0.50/8 0.50/S

PROCESSOR MEMORY: PROGRAM SIZE: 30.00 KBYTES 4.00 KBITES 32.00 KEYTES DATA REQUIREMENT: 4.50 KBYTES

4.00 KBYTES 60.00 KBYTES 0.00HRS DATA STORAGE: SECONDARY: 60.00 KBYTES 60.00 KBYTES 0.00% IN 0.00HRS 0.00% IN 0.00HRS PERISHABILITY: 0.00 KEYTES 0.00 KEYTES ARCHIVAL:

\* OF DISPLAYS: 1 1

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FUNCTION NO: 4.1.3.6PNAME: COMMAND INTERFACE PROCESSING

DATA SOURCES:

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE: 0.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: PHYSICAL LOCATION CODE:

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

IOC 6.00 KIPC 0.50/S REQUIREMENTS: GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 7.00 KIPC

REPETITION RATE:
PROCESSOR MEMORY: PROGRAM SIZE: 0.50/S 15.00 KBYTES 16.00 KBYTES DATA REQUIREMENT: 4.00 KBYTES 4.50 KBYTES

DATA STORAGE: SECONDARY: 30.00 KBYTES 30.00 KBYTES PERISHABILITY: ARCHIVAL: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

0.00 KEYTES 0.00 KEYTES \* OF DISPLAYS: 1

FUNCTION NO: 4.1.4.1 NAME: COMPUTE/PROPAGATE CONSTELLATION RELATIVE STATES

DATA SOURCES:

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE:

0.00 msec

COMMAND/CONTROL: LEVEL: A

LOCATION:

RATE:

0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE:

0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE:

PHYSICAL LOCATION CODE:

DIAGNOSTICS/SELF TEST: REQUIRED: N

NUMBER: O INTERVAL:

0.00 SEC

GROWTH REQUIREMENTS: IOC DATA PROCESSING INSTRUCTIONS PER CYCLE: 10.00 KIPC 10.00 KIPC REPETITION RATE: 0.10/5 0.10/S PROCESSOR MEMORY: PROGRAM SIZE: 8.00 KBYTES 9.00 KBYTES DATA REQUIREMENT: 1.00 KBYTES 2.00 KBYTES DATA STORAGE: SECONDARY: 16.00 KBYTES

16.00 KBYTES PERISHABILITY: 2.00% IN 0.25HRS 2.00% IN 0.25HRS ARCHIVAL: 0.00 KBYTES

\* OF DISPLAYS:

0.00 KBYTES 0

FUNCTION NO: 4.1.4.2 NAME: MANAGE CONSTELLATION ORBIT MANEUVERS

DATA SOURCES:

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE:

0.00 msec

COMMAND/CONTROL: LEVEL: A

LOCATION:

RATE: 0.00

0.00 SEC

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE:

PHYSICAL LOCATION CODE:

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL:

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 15.00 KIPC 18.00 KIPC REPETITION RATE:

0.10/\$ 0.10/\$ PROCESSOR MEMORY: PROGRAM SIZE: 10.00 KEYTES 2.00 KEYTES 15.00 KBYTES

DATA REQUIREMENT: 3.00 KBYTES DATA STORAGE: SECONDARY: 20.00 KBYTES 20.00 KBYTES

PERISHABILITY: 1.00% IN 0.25HRS 1.00% IN 0.25HRS ARCHIVAL:

0.00 KBYTES 0.00 KBYTES + OF DISPLAYS: 0 0

FUNCTION NO: 4.1.4.3 NAME: SCHEDULE DEPLOYMENT/RENDEZVOUS

DATA SOURCES:

**METHODOLOGY:** 

RESPONSE TIME: I/O DELAY ALLOWABLE: 0.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: PHYSICAL LOCATION CODE:

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 1.00 KIPC 1.50 KIPC REPETITION RATE: 0.10/S 0.10/S PROCESSOR MEMORY: PROGRAM SIZE: 5.00 KBYTES 6.00 KBYTES DATA REQUIREMENT: 1.00 KBYTES 2.00 KEYTES DATA STORAGE: SECONDARY: 10.00 KBYTES 10.00 KBYTES

PERISHABILITY: 1.00% IN 0.25HRS 1.00% IN 0.25HRS
ARCHIVAL: 0.00 KBYTES 0.00 KBYTES
OF DISPLAYS: 0 0

FUNCTION NO: 4.1.4.4 NAME: MANAGE RENDEZVOUS

DATA SOURCES:

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE:

0.00 msec

COMMAND/CONTROL: LEVEL: A

LOCATION:

0.00 RATE:

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE:

PHYSICAL LOCATION CODE:

REQUIREMENTS:

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: IOC

0.00 SEC

DATA PROCESSING INSTRUCTIONS PER CYCLE: REPETITION RATE:

5.00 KIPC 1.00/MN

GROWTH 4.00 KIPC 1.00/MN 9.00 KBYTES

PROCESSOR MEMORY: PROGRAM SIZE: DATA REQUIREMENT:

5.00 KEYTES 0.50 KEYTES 10.00 KBYTES 0.00% IN 0.00HRS 0.00% IN 0.00HRS

1.00 KBYTES 10.00 KBYTES

DATA STORAGE: SECONDARY: PERISHABILITY: ARCHIVAL:

0.00 KBYTES

0.00 KEYTES

0 0

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SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.1.4.5 NAME: TARGET COLLISION AVOIDANCE

DATA SOURCES:

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE:

0.00 msec

COMMAND/CONTROL: LEVEL: A

LOCATION:

RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE:

PHYSICAL LOCATION CODE:

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

IOC REQUIREMENTS: GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 1.00 KIPC 1.50 KIPC REPETITION RATE: 1.00/HR 1.00/HR PROCESSOR MEMORY: PROGRAM SIZE: 5.00 KBYTES 7.00 KBYTES DATA REQUIREMENT: 1.00 KBYTES 2.00 KBYTES DATA STORAGE: SECONDARY: 10.00 KBYTES 10.00 KBYTES

PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS ARCHIVAL: 0.00 KBYTES 0.00 KBYTES

FUNCTION NO: 4.1.4.6 NAME: COMMAND INTERFACE PROCESSING

DATA SOURCES:

**METHODOLOGY:** 

RESPONSE TIME: I/O DELAY ALLOWABLE: 0.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: PHYSICAL LOCATION CODE:

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH 10.00 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 12.00 KIPC REPETITION RATE: 1.00/HR 1.00/HR PROCESSOR MEMORY: PROGRAM SIZE: 15.00 KBYTES 18.00 KBYTES DATA REQUIREMENT: 2.00 KBYTES 3.00 KBYTES DATA STORAGE: SECONDARY: 30.00 KBYTES 30.00 KBYTES PERISHABILITY: 1.00% IN 0.25HRS 1.00% IN 0.25HRS

ARCHIVAL: 0.00 KEYTES 0.00 KEYTES

+ OF DISPLAYS: 5

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SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.1.5.1 NAME: LONG RANGE OBJECT TRACKING

DATA SOURCES:

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE:

0.00 msec

COMMAND/CONTROL: LEVEL: A

LOCATION:

**RATE:** 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE:

0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE:

PHYSICAL LOCATION CODE:

DIAGNOSTICS/SELF TEST: REQUIRED:

NUMBER:

O INTERVAL:

0.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 5.00 KIPC 6.00 KIPC REPETITION RATE: 1.00/\$ 1.00/S PROCESSOR MEMORY: PROGRAM SIZE: 40.00 KEYTES 50.00 KBYTES DATA REQUIREMENT: 5.00 KBYTES 6.00 KBYTES DATA STORAGE: SECONDARY: 80.00 KEYTES 80.00 KBYTES 0.00% IN 0.00HRS 0.00% IN 0.00HRS 0.00 KBYTES PERISHABILITY: ARCHIVAL: \* OF DISPLAYS: 0 0

FUNCTION NO: 4.1.5.2 NAME: PROXIMITY TRACKING

DATA SOURCES:

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE:

0.00 msec

COMMAND/CONTROL: LEVEL: A

LOCATION:

RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE:

PHYSICAL LOCATION CODE:

IOC

5.00 KIPC

0

DIAGNOSTICS/SELF TEST: REQUIRED:

NUMBER: O INTERVAL:

0.00 SEC

GROWTH

1..00/5

6.00 KIPC

50.00 KEYTES

7.00 KBYTES

80.00 KBYTES

REQUIREMENTS: DATA PROCESSING INSTRUCTIONS PER CYCLE: REPETITION RATE: PROCESSOR MEMORY: PROGRAM SIZE: DATA REQUIREMENT: DATA STORAGE: SECONDARY:

PERISHABILITY: ARCHIVAL: + OF DISPLAYS:

1.00/S 40.00 KBYTES 5.00 KBYTES 80.00 KBYTES 0.00% IN 0.00HRS 0.00% IN 0.00HRS 0.00 KEYTES

0.00 KBYTES 0

FUNCTION NO: 4.1.5.3 NAME: OBJECT CATALOGUE MAINTENANCE

DATA SOURCES:

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE: 0.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: PHYSICAL LOCATION CODE:

DIAGNOSTICS/SELF TEST: REQUIRED: NUMBER: 0 INTERVAL: 0.00 SEC

IOC REQUIREMENTS: GROWTH 3.00 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 2.00 KIPC REPETITION RATE: 1.00/MN 1.00/MN PROCESSOR MEMORY: PROGRAM SIZE: 25.00 KEYTES 30.00 KBYTES DATA REQUIREMENT: 10.00 KEYTES 12.00 KEYTES DATA STORAGE: SECONDARY: 70.00 KEYTES 70.00 KEYTES

PERISHABILITY: 10.00% IN 1.00HRS 10.00% IN 1.00HRS
ARCHIVAL: 0.00 KEYTES 0.00 KEYTES

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SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.1.5.4 NAME: TRACKING DATA CONDITIONING

DATA SOURCES:

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE:

0.00 msec

COMMAND/CONTROL: LEVEL: A

LOCATION:

**RATE:** 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE:

0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE:

PHYSICAL LOCATION CODE:

DIAGNOSTICS/SELF TEST: REQUIRED:

NUMBER:

O INTERVAL:

0.00 SEC

REQUIREMENTS: DATA PROCESSING INSTRUCTIONS PER CYCLE: REPETITION RATE:

5.00 KIPC 1.00/S 15.00 KBYTES

GROWTH 6.00 KIPC

PROCESSOR MEMORY: PROGRAM SIZE: DATA REQUIREMENT: DATA STORAGE: SECONDARY: PERISHABILITY:

2.00 KBYTES 30.00 KEYTES 0.00% IN 0.00HRS 0.00% IN 0.00HRS O.OO KBYTES

IOC

20.00 KBYTES 4.00 KBYTES 30.00 KBYTES

1.00/S

ARCHIVAL: \* OF DISPLAYS:

0

0.00 KBYTES

0

SSDS FUNCTIONAL DATA SHEET 20-JUL-1985

FUNCTION NO: 4.1.5.5 NAME: DEVICE MANAGEMENT

DATA SOURCES:

**METHODOLOGY:** 

RESPONSE TIME: I/O DELAY ALLOWABLE: 0.00 msec

COMMAND/CONTROL: LEVEL: I RATE: LOCATION: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: PHYSICAL LOCATION CODE:

DIAGNOSTICS/SELF TEST: REQUIRED: NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 5.00 KIPC 6.00 KIPC REPETITION RATE: 0.10/S 0.10/S PROCESSOR MEMORY: PROGRAM SIZE: 20.00 KBYTES 25.00 KBYTES DATA REQUIREMENT: 5.00 KEYTES 7.00 KBYTES DATA STORAGE: SECONDARY: 40.00 KEYTES 40.00 KBYTES

1.00% IN 1.00HRS 1.00% IN 1.00HRS 0.00 KBYTES 0.00 KBYTES PERISHABILITY: ARCHIVAL: \* OF DISPLAYS:

0 0

FUNCTION NO: 4.1.5.6 NAME: COMMAND INTERFACE PROCESSING

DATA SOURCES:

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE: 0.00 msec

COMMAND/CONTROL: LEVEL: I LOCATION: RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: PHYSICAL LOCATION CODE:

DIAGNOSTICS/SELF TEST: REQUIRED: NUMBER: 0 INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH

DATA PROCESSING INSTRUCTIONS PER CYCLE: 4.00 KIPC 5.00 KIPC

REPETITION RATE: 1.00/S 1.00/S

PROCESSOR MEMORY: PROGRAM SIZE: 20.00 KEYTES 25.00 KEYTES

DATA REQUIREMENT: 15.00 KEYTES 18.00 KEYTES

DATA STORAGE: SECONDARY: 70.00 KEYTES 70.00 KEYTES

DATA STORAGE: SECONDARY: 70.00 KBYTES 70.00 KBYTES
PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS
ARCHIVAL: 0.00 KBYTES 0.00 KBYTES

OF DISPLAYS: 0 0

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FUNCTION NO: 4.1.6.1 NAME: TIME SOURCE MANAGEMENT

DATA SOURCES: SPACE SHUTTLE

METHODOLOGY: EXISTING DESIGN AND CODE

RESPONSE TIME: I/O DELAY ALLOWABLE: 0.01 msec

COMMAND/CONTROL: LEVEL: A,I LOCATION: GOI RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH . DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.20 KIPC 0.30 KIPC 1.00/S REPETITION RATE: 1.00/S PROCESSOR MEMORY: PROGRAM SIZE: 0.50 KBYTES 0.70 KBYTES DATA REQUIREMENT: 0.20 KBYTES 0.30 KBYTES DATA STORAGE: SECONDARY: 0.00 KBYTES 0.00 KBYTES PERISHABILITY:

PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS
ARCHIVAL: 0.00 KBYTES 0.00 KBYTES

OF DISPLAYS: 1 2

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FUNCTION NO: 4.1.6.1PNAME: TIME SOURCE MANAGEMENT

DATA SOURCES: SPACE SHUTTLE

METHODOLOGY: EXISTING DESIGN AND CODE

RESPONSE TIME: I/O DELAY ALLOWABLE: 0.01 msec

COMMAND/CONTROL: LEVEL: A,I LOCATION: GOI RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: 0 INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH
DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.20 KIPC 0.30 KIPC

REPETITION RATE: 1.00/S 1.00/S

PROCESSOR MEMORY: PROGRAM SIZE: 0.50 KEYTES 0.70 KEYTES
DATA REQUIREMENT: 0.20 KEYTES 0.30 KEYTES

DATA STORAGE: SECONDARY: 0.00 KEYTES 0.00 KEYTES

PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS
ARCHIVAL: 0.00 KBYTES 0.00 KBYTES

OF DISPLAYS: 0 0

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SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.1.6.2 NAME: TIME UPDATE

DATA SOURCES: SPACE SHUTTLE

METHODOLOGY: EXISTING DESIGN/CODE

RESPONSE TIME: I/O DELAY ALLOWABLE:

10000.00 msec

COMMAND/CONTROL: LEVEL: A.I LOCATION: G RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

IOC REQUIREMENTS: GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.50 KIPC 0.70 KIPC REPETITION RATE: 0.00/DA 0.00/\$ PROCESSOR MEMORY: PROGRAM SIZE: 2.00 KEYTES 3.00 KEYTES DATA REQUIREMENT: 0.50 KBYTES 1.00 KBYTES DATA STORAGE: SECONDARY: 0.00 KBYTES 0.00 KBYTES

PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS 0.00 KBYTES ARCHIVAL: O.OO KEYTES + OF DISPLAYS: 1

1

SSDS FUNCTIONAL DATA SHEET 20-JUL-1985

FUNCTION NO: 4.1.6.2PNAME: TIME UPDATE

DATA SOURCES: SPACE SHUTTLE

METHODOLOGY: EXISTING DESIGN/CODE

10000.00 msec RESPONSE TIME: I/O DELAY ALLOWABLE:

COMMAND/CONTROL: LEVEL: A.I. LOCATION: G RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

IOC REQUIREMENTS: GROWTH

0.50 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.70 KIPC REPETITION RATE: 0.00/DA 0.00/8

PROCESSOR MEMORY: PROGRAM SIZE: 2.00 KBYTES 3.00 KBYTES 0.50 KBYTES 1.00 KBYTES DATA REQUIREMENT:

DATA STORAGE: SECONDARY: 0.00 KBYTES O.OO KEYTES PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

ARCHIVAL: 0.00 KBYTES 0.00 KBYTES \* OF DISPLAYS: 0

0

FUNCTION NO: 4.1.6.3 NAME: FREQUENCY SOURCE MANAGEMENT

DATA SOURCES:

METHODOLOGY: ESTIMATE 1/2 OF 4.1.6.1 LESS COMPLEX LOGIC & OPTIONS.

BUT MANY INDIVIDUAL

RESPONSE TIME: I/O DELAY ALLOWABLE:

1000.00 msec

COMMAND/CONTROL: LEVEL: A,I LOCATION: G,O RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH

DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.50 KIPC 0.70 KIPC

REPETITION RATE: 1.00/S 1.00/S

PROCESSOR MEMORY: PROGRAM SIZE: 1.00 KBYTES 2.00 KBYTES

DATA REQUIREMENT: 0.50 KBYTES 0.50 KBYTES

DATA STORAGE: SECONDARY: 0.00 KBYTES 0.00 KBYTES
PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS
ARCHIVAL: 0.00 KBYTES 0.00 KBYTES

OF DISPLATS:

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.1.6.3PNAME: FREQUENCY SOURCE MANAGEMENT

DATA SOURCES:

METHODOLOGY: ESTIMATE 1/2 OF 4.1.6.1 LESS COMPLEX LOGIC # OPTIONS.

BUT MANY INDIVIDUAL

RESPONSE TIME: I/O DELAY ALLOWABLE: 1000.00 msec

COMMAND/CONTROL: LEVEL: A,I LOCATION: G,O RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH
DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.50 KIPC 0.70 KIPC
REPETITION RATE: 1.00/S 1.00/S

PROCESSOR MEMORY: PROGRAM SIZE: 1.00 KEYTES 2.00 KEYTES

DATA REQUIREMENT: 0.50 KEYTES 0.50 KEYTES

DATA STORAGE: SECONDARY: 0.00 KEYTES 0.00 KEYTES

DATA STORAGE: SECONDARY: 0.00 KBYTES 0.00 KBYTES
PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS
ARCHIVAL: 0.00 KBYTES 0.00 KBYTES

FUNCTION NO: 4.1.6.4 NAME: DEVICE MANAGEMENT

DATA SOURCES: SPACE SHUTTLE (SENSE & REPORT STATUS)

METHODOLOGY: ESTIMATE CYCLIC STATUS AS COMPARABLE TO SHUTTLE. ESTIMATE

REQUEST PROCESSING AND CONTROL OUTPUTS AS 1/2 OF 4.1.6.1.

RESPONSE TIME: I/O DELAY ALLOWABLE: 10000.00 msec

COMMAND/CONTROL: LEVEL: A.I LOCATION: G.O RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH

DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.20 KIPC 0.30 KIPC

REPETITION RATE: 1.00/S 1.00/S

PROCESSOR MEMORY: PROGRAM SIZE: 0.30 KBYTES 0.50 KBYTES

PROCESSOR MEMORI: PROGRAM SIZE: 0.50 KBITES 0.50 KBITES

DATA REQUIREMENT: 0.10 KBITES 0.20 KBITES

DATA STORAGE: SECONDARY: 0.00 KBITES 0.00 KBITES

PERISHABILITY: 0.00 KBYTES 0.00 KBYTES

PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

ARCHIVAL: 0.00 KBYTES 0.00 KBYTES

OF DISPLAYS:

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.1.6.4PNAME: DEVICE MANAGEMENT

DATA SOURCES: SPACE SHUTTLE (SENSE & REPORT STATUS)

METHODOLOGY: ESTIMATE CYCLIC STATUS AS COMPARABLE TO SHUTTLE. ESTIMATE

REQUEST PROCESSING AND CONTROL OUTPUTS AS 1/2 OF 4.1.6.1.

RESPONSE TIME: I/O DELAY ALLOWABLE: 10000.00 msec

COMMAND/CONTROL: LEVEL: A,I LOCATION: G,O RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH

DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.20 KIPC 0.30 KIPC REPETITION RATE: 1.00/S 1.00/S 1.00/S PROCESSOR MEMORY: PROGRAM SIZE: 0.30 KBYTES 0.50 KBYTES DATA REQUIREMENT: 0.10 KBYTES 0.20 KBYTES

DATA REQUIREMENT: 0.10 KBYTES 0.20 KBYTES

DATA STORAGE: SECONDARY: 0.00 KBYTES 0.00 KBYTES

PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

ARCHIVAL: 0.00 KEYTES 0.00 KEYTES

OF DISPLAYS: 1

20-JUL-1985

SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.1.6.5 NAME: COMMAND INTERFACE PROCESSING

DATA SOURCES: NONE

METHODOLOGY: ESTIMATE OF DESIGN TO EXTRACT FUNCTION CODE FROM COMMAND

AND ROUTE DATA TO SUBFUNCTION

RESPONSE TIME: I/O DELAY ALLOWABLE:

1000.00 msec

COMMAND/CONTROL: LEVEL: A

LOCATION: G,O RATE:

0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE:

0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: N

NUMBER: O INTERVAL:

0.00 SEC

REQUIREMENTS: DATA PROCESSING INSTRUCTIONS PER CYCLE:

IOC 0.05 KIPC 0.00/DA

GROWTH 0.10 KIPC

REPETITION RATE: PROCESSOR MEMORY: PROGRAM SIZE:

0.20 KEYTES 0.10 KBYTES

0.00/ 0.40 KBYTES 0.20 KBYTES

DATA REQUIREMENT: DATA STORAGE: SECONDARY: PERISHABILITY:

0.00 KBYTES 0.00 KEYTES

0.00 KBYTES 0.00% IN 0.00HRS 0.00% IN 0.00HRS

ARCHIVAL: \* OF DISPLAYS:

0

0.00 KBYTES ٥

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SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.1.6.5PNAME: COMMAND INTERFACE PROCESSING

DATA SOURCES: NONE

METHODOLOGY: ESTIMATE OF DESIGN TO EXTRACT FUNCTION CODE FROM COMMAND

AND ROUTE DATA TO SUBFUNCTION

RESPONSE TIME: I/O DELAY ALLOWABLE:

1000.00 msec

COMMAND/CONTROL: LEVEL: A

LOCATION: G,O RATE:

0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL:

0.00 SEC

REQUIREMENTS:

IOC

GROWTH

DATA PROCESSING INSTRUCTIONS PER CYCLE: REPETITION RATE:

0.05 KIPC 0.00/DA 0.20 KBYTES

0.10 KIPC 0.00/ 0.40 KBYTES

PROCESSOR MEMORY: PROGRAM SIZE: DATA REQUIREMENT: DATA STORAGE: SECONDARY:
PERISHABILITY:

0.10 KEYTES 0.00 KBYTES

0.20 KBYTES 0.00 KEYTES

ARCHIVAL: \* OF DISPLAYS: 0.00 KEYTES

0.00% IN 0.00HRS 0.00% IN 0.00HRS 0.00 KBYTES

0

0

SSDS FUNCTIONAL DATA SHEET 20-JUL-1985

FUNCTION NO: 4.2.1.1 NAME: EVALUATE ARRAY PERFORMANCE

DATA SOURCES: RFP

METHODOLOGY: ENGINEERING ANALYSIS

RESPONSE TIME: I/O DELAY ALLOWABLE:

1.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: O RATE: 100.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: R

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 2 INTERVAL: 100000.00 SEC

REQUIREMENTS: IOC **GROWTH** 2.50 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 10.00 KIPC REPETITION RATE: 1.00/S 1.00/S PROCESSOR MEMORY: PROGRAM SIZE: 5.00 KBYTES 5.00 KBYTES 18.00 KBYTES
12.00 KBYTES 48.00 KBYTES
12.00 KBYTES 50.00 KBYTES
0.00% IN 0.00HRS 0.00% IN 0.00HRS 18.00 KBYTES DATA REQUIREMENT: DATA STORAGE: SECONDARY:
PERISHABILITY:
ARCHIVAL:

12.00 KBYTES 48.00 KBYTES • OF DISPLAYS: 2

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.2.1.1PNAME: EVALUATE ARRAY PERFORMANCE

DATA SOURCES: RFP

METHODOLOGY: ENGINEERING ANALYSIS

RESPONSE TIME: I/O DELAY ALLOWABLE: 200.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: O RATE: 100.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: , 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: R

DIAGNOSTICS/SELF TEST: REQUIRED: I NUMBER: 2 INTERVAL: 100000.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 2.50 KIPC 2.50 KIPC REPETITION RATE: 1.00/S 1.00/S

PROCESSOR MEMORY: PROGRAM SIZE: 5.00 KBYTES 6.00 KEYTES DATA REQUIREMENT:
DATA STORAGE: SECONDARY:
PERISHABILITY: 4.00 KBYTES 6.00 KBYTES

4.00 KBYTES 6.00 KBYTES 0.00% IN 0.00HRS 0.00% IN 0.00HRS ARCHIVAL: 8.00 KEYTES 12.00 KBYTES

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SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.2.1.2 NAME: CONFIGURE POWER DISTRIBUTION

DATA SOURCES: RFP

METHODOLOGY: ENGINEERING ANALYSIS, REQUIREMENTS EVALUATION, ADAPTATION OF

DATA IN TECHNICAL LITERATURE

RESPONSE TIME: I/O DELAY ALLOWABLE:

1.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: O RATE: 100.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH: 0

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 3 INTERVAL: 60.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 28.00 KIPC 50.00 KIPC REPETITION RATE: 1.00/S 1.00/S PROCESSOR MEMORY: PROGRAM SIZE: 50.00 KEYTES 80.00 KBYTES DATA REQUIREMENT: 150.00 KBYTES 300.00 KBYTES DATA STORAGE: SECONDARY: 400.00 KEYTES 600.00 KBYTES PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

ARCHIVAL: 150.00 KEYTES 300.00 KEYTES

OF DISPLAYS: 2

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.2.1.2PNAME: CONFIGURE POWER DISTRIBUTION

DATA SOURCES: RFP

METHODOLOGY: ENGINEERING ANALYSIS, REQUIREMENTS EVALUATION, ADAPTATION OF

DATA IN TECHNICAL LITERATURE

RESPONSE TIME: I/O DELAY ALLOWABLE: 1.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: O RATE: 100.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH: 0

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 3 INTERVAL: 60.00 SEC

REQUIREMENTS: IOC GROWTH
DATA PROCESSING INSTRUCTIONS PER CYCLE: 28.00 KIPC 50.00 KIPC
REPETITION RATE: 1.00/S 1.00/S

PROCESSOR MEMORY: PROGRAM SIZE: 10.00 KBYTES 60.00 KBYTES
DATA REQUIREMENT: 12.00 KBYTES 24.00 KBYTES

DATA STORAGE: SECONDARY: 40.00 KBYTES 60.00 KBYTES
PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS
ARCHIVAL: 80.00 KBYTES 120.00 KBYTES

FUNCTION NO: 4.2.1.3 NAME: POWER SOURCE MANAGEMENT

DATA SOURCES: RFP

METHODOLOGY: ENGINEERING ANALYSIS. REQUIREMENTS EVALUATION

RESPONSE TIME: I/O DELAY ALLOWABLE: 1.00 msec

COMMAND/CONTROL: LEVEL: A LOGATION: O RATE: 100.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH: 0

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: R

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 5 INTERVAL: 60.00 SEC

REQUIREMENTS: IOC GROWTH 19.00 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 35.00 KIPC REPETITION RATE: 1.00/8 1.00/S PROCESSOR MEMORY: PROGRAM SIZE: 30.00 KBYTES 60.00 KBYTES DATA REQUIREMENT: 100.00 KEYTES 200.00 KBYTES DATA STORAGE: SECONDARY: 200.00 KEYTES 300.00 KBYTES PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

ARCHIVAL: 100.00 KEYTES 200.00 KEYTES + OF DISPLAYS: 2

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.2.1.3PNAME: POWER SOURCE MANAGEMENT

DATA SOURCES: RFP

METHODOLOGY: ENGINEERING ANALYSIS, REQUIREMENTS EVALUATION

RESPONSE TIME: I/O DELAY ALLOWABLE: 1.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: O RATE: 100.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH: 0

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: R

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 3 INTERVAL: 60.00 SEC

REQUIREMENTS: IOC GROWTH
DATA PROCESSING INSTRUCTIONS PER CYCLE: 19.00 KIPC 35.00 KIPC
REPETITION RATE: 1.00/S 1.00/S

PROCESSOR MEMORY: PROGRAM SIZE: 10.00 KBYTES 20.00 KBYTES

DATA REQUIREMENT: 10.00 KBYTES 20.00 KBYTES

DATA STORAGE: SECONDARY: 20.00 KBYTES 20.00 KBYTES

DATA STORAGE: SECONDARY: 20.00 KBYTES 40.00 KBYTES
PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS
ARCHIVAL: 40.00 KBYTES 80.00 KBYTES

FUNCTION NO: 4.2.1.4 NAME: ARRAY DEPLOYMENT

DATA SOURCES:

METHODOLOGY: ENGINEERING ANALYSIS

RESPONSE TIME: I/O DELAY ALLOWABLE: 1000.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: O RATE: 100.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: R

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 2 INTERVAL: 100000.00 SEC

IOC REQUIREMENTS: GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.50 KIPC 2.00 KIPC REPETITION RATE: 1.00/S 1.00/S PROCESSOR MEMORY: PROGRAM SIZE: 1.00 KEYTES 4.00 KBYTES DATA REQUIREMENT: 2.00 KEYTES 8.00 KEYTES DATA STORAGE: SECONDARY: 4.00 KBYTES 4.00 KBYTES PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS ARCHIVAL: 8.00 KBYTES 8.00 KEYTES \* OF DISPLAYS: 1

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.2.1.4PNAME: ARRAY DEPLOYMENT

DATA SOURCES:

METHODOLOGY: ENGINEERING ANALYSIS

RESPONSE TIME: I/O DELAY ALLOWABLE: 1000.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: 0 RATE: 100.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: R

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 2 INTERVAL: 100000.00 SEC

REQUIREMENTS: IOC GROWTH

DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.50 KIPC 2.00 KIPC

REPETITION RATE: 1.00/S 1.00/S

PROCESSOR MEMORY: PROGRAM SIZE: 1.00 KBYTES 4.00 KBYTES

DATA REQUIREMENT: 2.00 KBYTES 4.00 KBYTES

DATA STORAGE: SECONDARY: 2.00 KBYTES 4.00 KBYTES
PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

ARCHIVAL: 4.00 KBYTES 8.00 KBYTES

\* OF DISPLAYS: 1

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FUNCTION NO: 4.2.1.5 NAME: PROJECT ENERGY AVAILABLE

DATA SOURCES: RFP

METHODOLOGY: ENGINEERING ANALYSIS

RESPONSE TIME: I/O DELAY ALLOWABLE: 1.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: O RATE: 100.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH: 0

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: R

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 3 INTERVAL: 1000.00 SEC

IOC GROWTH REQUIREMENTS: 1.20 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 1.20 KIPC REPETITION RATE: 1.00/S 1.00/S PROCESSOR MEMORY: PROGRAM SIZE: 15.00 KEYTES 15.00 KBYTES DATA REQUIREMENT: 6.00 KEYTES 6.00 KBYTES DATA STORAGE: SECONDARY: 12.00 KBYTES 12.00 KBYTES

PERISHABILITY: 90.00% IN 24.00HRS 90.00% IN 24.00HRS
ARCHIVAL: 0.00 KBYTES 0.00 KBYTES

+ OF DISPLAYS: 1

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.2.1.5PNAME: PROJECT ENERGY AVAILABLE

DATA SOURCES: RFP

METHODOLOGY: ENGINEERING ANALYSIS

RESPONSE TIME: I/O DELAY ALLOWABLE: 1.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: O RATE: 100.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH: O

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: R

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 3 INTERVAL: 1000.00 SEC

REQUIREMENTS: IOC GROWTH
DATA PROCESSING INSTRUCTIONS PER CYCLE: 1.20 KIPC 1.20 KIPC
REPETITION RATE: 1.00/S 1.00/S

PROCESSOR MEMORY: PROGRAM SIZE: 10.00 KBYTES 15.00 KBYTES
DATA REQUIREMENT: 2.00 KBYTES 5.00 KBYTES

DATA STORAGE: SECONDARY: 12.00 KBYTES 20.00 KBYTES PERISHABILITY: 90.00% IN 24.00HRS 90.00% IN 24.00HRS

ARCHIVAL: 0.00 KBYTES 0.00 KBYTES

OF DISPLAYS: 1

FUNCTION NO: 4.2.1.6 NAME: DEVICE MANAGEMENT

DATA SOURCES: F 4 2.2.2

METHODOLOGY: SIMILARITY ANALYSIS

RESPONSE TIME: I/O DELAY ALLOWABLE: 100.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: O RATE: 0.01

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: O INTERVAL: 1.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 25.00 KIPC 50.00 KIPC REPETITION RATE: 1.00/S 1.00/S PROCESSOR MEMORY: PROGRAM SIZE: 50.00 KBYTES 100.00 KBYTES 2.00 KEYTES DATA REQUIREMENT: DATA REQUIREMENTS
DATA STORAGE: SECONDARY:
PERISHABILITY: 4.00 KBYTES 10.00 KBYTES 25.00 KBYTES

0.00% IN 0.00HRS 0.00% IN 0.00HRS 10.00 KBYTES ARCHIVAL: 25.00 KBYTES \* OF DISPLAYS: 2 3

24-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.2.1.6PNAME: DEVICE MANAGEMENT

DATA SOURCES: F 4.2.2.2

METHODOLOGY: SIMILARITY ANALYSIS

RESPONSE TIME: I/O DELAY ALLOWABLE: 100.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: O RATE: 0.01

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 0 INTERVAL: 1.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 18.00 KIPC . 36.00 KIPC REPETITION RATE: 1.00/S 1.00/S

PROCESSOR MEMORY: PROGRAM SIZE: 25.00 KBYTES 50.00 KBYTES DATA REQUIREMENT: 1.50 KEYTES 5.00 KEYTES 3.00 KBYTES

DATA STORAGE: SECONDARY:
PERISHABILITY:
ARCHIVAL: 12.00 KBYTES 0.00% IN 0.00HRS 0.00% IN 0.00HRS 10.00 KBYTES 25.00 KBYTES

FUNCTION NO: 4.2.1.7 NAME: COMMAND I/F PROCESSING

DATA SOURCES: F 5.1.2.3

METHODOLOGY: SIMILARITY ANALYSIS

RESPONSE TIME: I/O DELAY ALLOWABLE: 10000.00 msec

RATE: COMMAND/CONTROL: LEVEL: I LOCATION: O 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

IOC REQUIREMENTS: GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.50 KIPC 0.50 KIPC REPETITION RATE: 1.00/DA 1.00/DAY PROCESSOR MEMORY: PROGRAM SIZE: 15.00 KBYTES 15.00 KBYTES 5.00 KBYTES 5.00 KBYTES 25.00 KBYTES 25.00 KBYTES DATA REQUIREMENTS
DATA STORAGE: SECONDARY:
PERISHABILITY: DATA REQUIREMENT: 0.00% IN . 0.00HRS 0.00% IN 0.00HRS

ARCHIVAL: + OF DISPLAYS: 0.00 KEYTES 0.00 KBYTES

3 3

24-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.2.1.7PNAME: COMMAND I/F PROCESSING

DATA SOURCES: F 5.1.2.3

METHODOLOGY: SIMILARITY ANALYSIS

RESPONSE TIME: I/O DELAY ALLOWABLE: 10000.00 msec

COMMAND/CONTROL: LEVEL: I LOCATION: O RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: GROWTH IOC DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.50 KIPC 0.50 KIPC 1.00/DA REPETITION RATE: 1.00/DAY PROCESSOR MEMORY: PROGRAM SIZE: 7.00 KBYTES 7.00 KBYTES 5.00 KBYTES DATA REQUIREMENT: 3.00 KBYTES 15.00 KEYTES DATA STORAGE: SECONDARY: 15.00 KBYTES

15.00 KBYTES 15.00 KBYTES 0.00% IN 0.00HRS 0.00% IN 0.00HRS PERISHABILITY:
ARCHIVAL: 0.00 KEYTES 0.00 KEYTES

SSDS FUNCTIONAL DATA SHEET 20-JUL-1985

FUNCTION NO: 4.2.2.1 NAME: MANAGE THERMAL LOAD

DATA SOURCES: RFP.MRWG J8400039.CR

METHODOLOGY: ENGINEERING ANALYSIS AND DESIGN

RESPONSE TIME: I/O DELAY ALLOWABLE: 2000.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: O RATE: 0.01

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH: G 0

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 2 INTERVAL: 1.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 10.00 KIPC 15.00 KIPC REPETITION RATE: 1.00/S 1.00/S PROCESSOR MEMORY: PROGRAM SIZE: 1.00 KBYTES 1.00 KEYTES DATA REQUIREMENT: 1.00 KBYTES 2.50 KBYTES DATA STORAGE: SECONDARY:

20.00 KEYTES 50.00 KEYTES 100.00% IN 12.00HRS100.00% IN 12.00HRS 10.00 KEYTES 25.00 KEYTES PERISHABILITY: ARCHIVAL: • OF DISPLAYS: 20 30

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.2.2.1PNAME: MANAGE THERMAL LOAD

DATA SOURCES: RFP, MRWG J8400039, CR

METHODOLOGY: ENGINEERING ANALYSIS AND DESIGN

RESPONSE TIME: I/O DELAY ALLOWABLE: 2000.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: O RATE: 0.01

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED: T NUMBER: 2 INTERVAL: 1.00 SEC

IOC REQUIREMENTS: GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 4.00 KIPC

REPETITION RATE: 2.00/MIN 2.00/MIN PROCESSOR MEMORY: PROGRAM SIZE: 1.00 KBYTES 1.00 KBYTES

DATA REQUIREMENT: 3.00 KBYTES 4.50 KBYTES DATA STORAGE: SECONDARY: 10.00 KBYTES 15.00 KBYTES

PERISHABILITY: 100.00% IN 12.00HRS100.00% IN 12.00HRS ARCHIVAL: 10.00 KBYTES 5.00 KBYTES

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\* OF DISPLAYS: 10 15

6.00 KIPC

SSDS FUNCTIONAL DATA SHEET 20-JUL-1985 ·

FUNCTION NO: 4.2.2.2 NAME: THERMAL DEVICE MANAGEMENT

DATA SOURCES: SEE SHEET

METHODOLOGY: ENGINEERING ANALYSIS AND DESIGN

RESPONSE TIME: I/O DELAY ALLOWABLE: 2000.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: O RATE: 0.01

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH: 0

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 2 INTERVAL: 1.00 SEC

IOC 5.00 KIPC .REQUIREMENTS: GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 7.00 KIPC 1.00/S REPETITION RATE: 1.00/S PROCESSOR MEMORY: PROGRAM SIZE: 50.00 KBYTES 100.00 KBYTES

2.00 KBYTES DATA REQUIREMENT: 4.00 KBYTES 10.00 KEYTES 25.00 KBYTES

DATA STORAGE: SECONDARY:
PERISHABILITY:
ARCHIVAL: 0.00% IN 0.00HRS 0.00% IN 0.00HRS 10.00 KBYTES 25.00 KBYTES

+ OF DISPLAYS: 10 15

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.2.2.2PNAME: THERMAL DEVICE MANAGEMENT

DATA SOURCES: SEE SHEET

METHODOLOGY: ENGINEERING ANALYSIS AND DESIGN

RESPONSE TIME: I/O DELAY ALLOWABLE: 2000.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: O RATE: 0.01

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH: 0 0

PHYSICAL LOCATION CODE: M SYSTEM DEPENDENCY CODE: I

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 2 INTERVAL: 1.00 SEC

IOC REQUIREMENTS: GROWTH 2.50 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 3.50 KIPC

1.00/S REPETITION RATE: 1.00/S PROCESSOR MEMORY: PROGRAM SIZE: 50.00 KBYTES 100.00 KBYTES

DATA REQUIREMENT: 2.00 KEYTES 10.00 KEYTES 4.00 KBYTES 25.00 KEYTES

DATA STORAGE: SECONDARY:
PERISHABILITY:
ARCHIVAL: 100.00% IN 12.00HRS100.00% IN 12.00HRS

10.00 KBYTES 25.00 KBYTES \* OF DISPLAYS: 3

SSDS FUNCTIONAL DATA SHEET 20-JUL-1985

FUNCTION NO: 4.2.2.3 NAME: PROJECT THERMAL LOAD CAPACITY

DATA SOURCES: SEE SHEET

METHODOLOGY: ENGINEERING ANALYSIS AND DESIGN

RESPONSE TIME: I/O DELAY ALLOWABLE: 2000.00 msec

LOCATION: O RATE: 0.01 COMMAND/CONTROL: LEVEL: A

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH: O

PHYSICAL LOCATION CODE: M SYSTEM DEPENDENCY CODE:

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 2 INTERVAL: 1.00 SEC

IOC REQUIREMENTS: GROWTH 10.00 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 10.00 KIPC REPETITION RATE: 2.00/MN 2.00/MN PROCESSOR MEMORY: PROGRAM SIZE: 1.00 KEYTES 1.00 KBYTES DATA REQUIREMENT: 1.00 KBYTES 2.50 KBYTES 10.00 KBYTES 25.00 KBYTES

DATA STORAGE: SECONDARY:

PERISHABILITY:

ARCHIVAL:

10.00 KBYTES

25.00 KBYTES

100.00% IN 12.00HRS100.00% IN 12.00HRS

10.00 KBYTES

25.00 KBYTES

\* OF DISPLAYS: 2 2

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.2.2.3PNAME: PROJECT THERMAL LOAD CAPACITY

DATA SOURCES: SEE SHEET

METHODOLOGY: ENGINEERING ANALYSIS AND DESIGN

RESPONSE TIME: I/O DELAY ALLOWABLE: 2000.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: O RATE: 0.01

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH: O

SYSTEM DEPENDENCY CODE: PHYSICAL LOCATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 2 INTERVAL: 1.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 10.00 KIPC 10.00 KIPC

REPETITION RATE: 2.00/MN 2.00/MN 1.00 KEYTES PROCESSOR MEMORY: PROGRAM SIZE: 1.00 KBYTES DATA REQUIREMENT: 1.00 KBYTES 2.50 KBYTES

DATA STORAGE: SECONDARY: 10.00 KBYTES 25.00 KBYTES PERISHABILITY: 100.00% IN 12.00HRS100.00% IN 12.00HRS

ARCHIVAL: 10.00 KBYTES 25.00 KBYTES \* OF DISPLAYS: 2 2

SSDS FUNCTIONAL DATA SHEET 20-JUL-1985

FUNCTION NO: 4.2.2.4 NAME: COMMAND INTERFACE PROCESSING

DATA SOURCES: 5.1.2.3

METHODOLOGY: SIMILARITY ANALYSIS

RESPONSE TIME: I/O DELAY ALLOWABLE: 10000.00 msec

LOCATION: O RATE: 0.00 COMMAND/CONTROL: LEVEL: I

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

IOC GROWTH REQUIREMENTS: 0.50 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.50 KIPC 1.00/DA REPETITION RATE: 1.00/DA PROCESSOR MEMORY: PROGRAM SIZE: 15.00 KBYTES 15.00 KBYTES DATA REQUIREMENT: 5.00 KBYTES 5.00 KEYTES 25.00 KBYTES DATA STORAGE: SECONDARY: 25.00 KBYTES

0.00% IN 0.00HRS 0.00% IN 0.00HRS PERISHABILITY: ARCHIVAL: O.OO KBYTES 0.00 KBYTES

\* OF DISPLAYS: 3 3

24-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.2.2.4PNAME: COMMAND INTERFACE PROCESSING

DATA SOURCES: 5.1.2.3

METHODOLOGY: SIMILARITY ANALYSIS

RESPONSE TIME: I/O DELAY ALLOWABLE: 10000.00 msec

COMMAND/CONTROL: LEVEL: I LOCATION: O RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH 0.50 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.50 KIPC

REPETITION RATE: 1.00/DA 1.00/DA PROCESSOR MEMORY: PROGRAM SIZE: 7.00 KBYTES 10.00 KBYTES

3.00 KBYTES 15.00 KBYTES DATA REQUIREMENT: 4.00 KBYTES 20.00 KBYTES DATA STORAGE: SECONDARY:

PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS ARCHIVAL: O.OO KEYTES 0.00 KBYTES

FUNCTION NO: 4.2.3.1 NAME: MECHANISM CONTROL/SAFETY

DATA SOURCES: SHUTTLE ONBOARD S/W SIZING & LOADING DATABASE

METHODOLOGY: REVIEWED SHUTTLE MECHANISM AND ESTIMATED EXTENSIVE

NEEDS FOR SPACE STATION

RESPONSE TIME: I/O DELAY ALLOWABLE: 2000.00 msec

COMMAND/CONTROL: LEVEL: A.I LOCATION: G.O RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH: NONE

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

IOC REQUIREMENTS: GROWTH 1.00 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 1.50 KIPC REPETITION RATE: 1.00/S 1.00/S PROCESSOR MEMORY: PROGRAM SIZE: 7.00 KBYTES 14.00 KBYTES DATA REQUIREMENT: 10.00 KBYTES 5.00 KBYTES

DATA STORAGE: SECONDARY: 12.00 KEYTES 24.00 KBYTES PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS ARCHIVAL: 0.00 KBYTES

0.00 KEYTES \* OF DISPLAYS: 0 0

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.2.3.1PNAME: MECHANISM CONTROL/SAFETY

DATA SOURCES: SHUTTLE ONBOARD S/W SIZING & LOADING DATABASE

METHODOLOGY: REVIEWED SHUTTLE MECHANISM AND ESTIMATED EXTENSIVE

NEEDS FOR SPACE STATION

RESPONSE TIME: I/O DELAY ALLOWABLE: 2000.00 msec

COMMAND/CONTROL: LEVEL: A.I LOCATION: G.O RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH: NONE

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH 0.40 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.60 KIPC

REPETITION RATE: 1.00/S 1.00/S PROCESSOR MEMORY: PROGRAM SIZE: 2.80 KBYTES

5.60 KBYTES DATA REQUIREMENT: 2.00 KBYTES 4.00 KBYTES

5.00 KBYTES DATA STORAGE: SECONDARY: 10.00 KBYTES

PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS ARCHIVAL: O.OO KBYTES 0.00 KBYTES

FUNCTION NO: 4.2.3.2 NAME: MRMS OPERATIONS

DATA SOURCES: SHUTTLE ONBOARD S/W SIZING & LOADING DATABASE

METHODOLOGY: EXAMINED RMS DESIGN; ARM CONTROL LINE SHUTTLE, MOBILE

PLATFORM CONTROL ESTIMATED FROM RMS & OTHER CMD/RESP S/W

RESPONSE TIME: I/O DELAY ALLOWABLE:

20.00 msec

RATE:

COMMAND/CONTROL: LEVEL: I,A '

LOCATION: O

0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE:

1.00 E -6

SYNCHRONIZATION WITH: 4.2.3.3

SYSTEM DEPENDENCY CODE: S

PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: I NUMBER: 1 INTERVAL: 10000.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 3.60 KIPC 7.20 KIPC REPETITION RATE: 12.50/8 12.50/ PROCESSOR MEMORY: PROGRAM SIZE: 21.00 KBYTES 42.00 KBYTES 10.00 KETTES DATA REQUIREMENT: 20.00 KBYTES DATA STORAGE: SECONDARY: 31.00 KEYTES 62.00 KBYTES

PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS ARCHIVAL: 0.00 KEYTES 0.00 KEYTES

OF DISPLAYS: 0 0

FUNCTION NO: 4.2.3.3 NAME: MANAGE DOCKING/BERTHING

DATA SOURCES: SHUTTLE ONBOARD S/W SIZING AND LOADING DATA BASE

METHODOLOGY: PARTIAL DATA FROM ACTIVE DOCKING PROCESS PLUS CONTROL

ESTIMATES FOR EXTERNAL VEHICLE

RESPONSE TIME: I/O DELAY ALLOWABLE: 100.00 msec

COMMAND/CONTROL: LEVEL: A.I LOCATION: O RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: S PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 1 INTERVAL: 1000000.00 SEC

IOC REQUIREMENTS: GROWTH 6.00 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 2.00 KIPC REPETITION RATE: 1.00/S 1.00/S PROCESSOR MEMORY: PROGRAM SIZE: 5.00 KBYTES 15.00 KBYTES DATA REQUIREMENT: 4.00 KEYTES 12.00 KBYTES DATA STORAGE: SECONDARY: 9.00 KBYTES 27.00 KBYTES PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

0.00 KBYTES ARCHIVAL: 0.00 KEYTES \* OF DISPLAYS: 0 0

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.2.3.3PNAME: MANAGE DOCKING/BERTHING

DATA SOURCES: SHUTTLE ONBOARD S/W SIZING AND LOADING DATA BASE

METHODOLOGY: PARTIAL DATA FROM ACTIVE DOCKING PROCESS PLUS CONTROL

ESTIMATES FOR EXTERNAL VEHICLE

RESPONSE TIME: I/O DELAY ALLOWABLE: 100.00 msec

COMMAND/CONTROL: LEVEL: A.I LOCATION: 0 RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: S PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 1 INTERVAL: 1000000.00 SEC

REQUIREMENTS: IOC GROWTH 0.80 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 1.60 KIPC REPETITION RATE: 1.00/S 1.00/S PROCESSOR MEMORY: PROGRAM SIZE: 2.00 KBYTES 3.00 KEYTES

1.60 KEYTES DATA REQUIREMENT: 2.00 KBYTES 3.60 KBYTES 5.00 KBYTES

DATA STORAGE: SECONDARY: PERISHABILITY: ARCHIVAL: 0.00% IN 0.00HRS 0.00% IN 0.00HRS 0.00 KEYTES 0.00 KBYTES

# OF DISPLAYS: 0 0

FUNCTION NO: 4.2.3.4 NAME: DEVICE MANAGEMENT

DATA SOURCES: SHUTTLE ONBOARD S/W SIZING & LOADING DATA BASE

METHODOLOGY: REVIEWED SEVERAL SIMILAR SOP'S FROM SHUTTLE DESIGN

RESPONSE TIME: I/O DELAY ALLOWABLE: 100.00 msec

COMMAND/CONTROL: LEVEL: I,A LOCATION: O RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH: 0

SYSTEM DEPENDENCY CODE: S PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 20 INTERVAL: 3600.00 SEC

REQUIREMENTS: IOC GROWTH 1.00 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.50 KIPC REPETITION RATE: 1.00/S 1.00/S PROCESSOR MEMORY: PROGRAM SIZE: 10.00 KBYTES 20.00 KBYTES DATA REQUIREMENT: 10.00 KEYTES 20.00 KBYTES DATA STORAGE: SECONDARY: 20.00 KEYTES 40.00 KBYTES 0.00% IN 0.00HRS 0.00% IN 0.00HRS PERISHABILITY: ARCHIVAL: 0.00 KBYTES 0.00 KEYTES

# OF DISPLAYS: 0.00 KBITES 0.00 KBITES

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.2.3.4PNAME: DEVICE MANAGEMENT

DATA SOURCES: SHUTTLE ONBOARD S/W SIZING & LOADING DATA BASE

METHODOLOGY: REVIEWED SEVERAL SIMILAR SOP'S FROM SHUTTLE DESIGN

RESPONSE TIME: I/O DELAY ALLOWABLE: 100.00 msec

COMMAND/CONTROL: LEVEL: I,A LOCATION: O RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH: 0

SYSTEM DEPENDENCY CODE: S PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 20 INTERVAL: 3600.00 SEC

REQUIREMENTS: IOC GROWTH

DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.20 KIPC 0.40 KIPC

REPETITION RATE: 1.00/S 1.00/S

PROCESSOR MEMORY: PROGRAM SIZE: 4.00 KEYTES 8.00 KEYTES

DATA REQUIREMENT: 4.00 KBYTES 8.00 KBYTES
DATA STORAGE: SECONDARY: 5.00 KBYTES 6.00 KBYTES

PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS
ARCHIVAL: 0.00 KBYTES 0.00 KBYTES

 **OF DISPLAYS:** 

FUNCTION NO: 4.2.3.5 NAME: COMMAND INTERFACE PROCESSING

DATA SOURCES: SHUTTLE ONBOARD S/W SIZING & LOADING DATA BASE

METHODOLOGY: REVIEWED SIMILAR SHUTTLE DESIGN SUPPORT-DISPLAYS AND

KEYBOARD/TLM COMMAND IMPLEMENTATION

RESPONSE TIME: I/O DELAY ALLOWABLE: 100.00 msec

COMMAND/CONTROL: LEVEL: I LOCATION: O RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH: 0

SYSTEM DEPENDENCY CODE: S PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH
DATA PROCESSING INSTRUCTIONS PER CYCLE: 6.00 KIPC 15.00 KIPC
REPETITION RATE: 0.50/S 0.50/S

PROCESSOR MEMORY: PROGRAM SIZE: 27.00 KBYTES 74.00 KBYTES
DATA REQUIREMENT: 9.00 KBYTES 25.00 KBYTES

DATA STORAGE: SECONDARY: 36.00 KBYTES 99.00 KBYTES
PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS
ARCHIVAL: 0.00 KBYTES 0.00 KBYTES

# OF DISPLAYS: 12 33

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.2.3.5PNAME: COMMAND INTERFACE PROCESSING

DATA SOURCES: SHUTTLE ONBOARD S/W SIZING & LOADING DATA BASE

METHODOLOGY: REVIEWED SIMILAR SHUTTLE DESIGN SUPPORT-DISPLAYS AND

KEYBOARD/TLM COMMAND IMPLEMENTATION

RESPONSE TIME: I/O DELAY ALLOWABLE: 100.00 msec

COMMAND/CONTROL: LEVEL: I LOCATION: 0 RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH: 0

SYSTEM DEPENDENCY CODE: S PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: 0 INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH
DATA PROCESSING INSTRUCTIONS PER CYCLE: 2.00 KIPC 4.00 KIPC
REPETITION RATE: 0.50/S 0.50/S

PROCESSOR MEMORY: PROGRAM SIZE: 5.00 KBYTES 7.00 KBYTES

DATA REQUIREMENT: 2.00 KBYTES 4.00 KBYTES

DATA STORAGE: SECONDARY: 4.00 KBYTES 8.00 KBYTES

PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS
ARCHIVAL: 0.00 KBYTES 0.00 KBYTES

DISPLAYS: 12 33

FUNCTION NO: 4.2.4.1 NAME: CONTROL ATMOS. PRESSURE & COMPOSITION

DATA SOURCES: RFP

METHODOLOGY: RFP PLUS BACKGROUND EXPERIENCE

RESPONSE TIME: I/O DELAY ALLOWABLE:

1000.00 msec

COMMAND/CONTROL: LEVEL: A

LOCATION: 0

RATE: 0.05

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1000.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: S

PHYSICAL LOCATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 11 INTERVAL: 29000.00 SEC

IOC GROWTH REQUIREMENTS: 1.00 KIPC 1.00 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: REPETITION RATE: 1.00/MN 1.00/MN PROCESSOR MEMORY: PROGRAM SIZE: 4.00 KBYTES 4.00 KBYTES 5.00 KEYTES DATA REQUIREMENT: 5.00 KBYTES DATA STORAGE: SECONDARY: 0.00 KBYTES 0.00 KBYTES

PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS ARCHIVAL: 0.00 KEYTES 0.00 KEYTES

\* OF DISPLAYS: 11 11

20-JUL-1985

SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.2.4.2 NAME: CONTROL TEMP/HUMIDITY

DATA SOURCES: RFP

METHODOLOGY: RFP PLUS BACKGROUND EXPERIENCE

RESPONSE TIME: I/O DELAY ALLOWABLE:

60000.00 msec

RATE:

COMMAND/CONTROL: LEVEL: A

LOCATION: O

0.05

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1000.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: S

PHYSICAL LOCATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 11 INTERVAL: 29000.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 1.00 KIPC 1.00 KIPC 1.00/MN REPETITION RATE: 1.00/MN PROCESSOR MEMORY: PROGRAM SIZE: 4.00 KBYTES 4.00 KBYTES DATA REQUIREMENT: 5.00 KBYTES 5.00 KBYTES DATA STORAGE: SECONDARY: 0.00 KBYTES 0.00 KBYTES PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

ARCHIVAL: 0.00 KBYTES 0.00 KBYTES

OF DISPLAYS: 7

SSDS FUNCTIONAL DATA SHEET 20-JUL-1985

FUNCTION NO: 4.2.4.3 NAME: POTABLE WATER MANAGEMENT

DATA SOURCES: RFP

METHODOLOGY: RFP PLUS BACKGROUND EXPERIENCE

RESPONSE TIME: I/O DELAY ALLOWABLE: 60000.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: 0 RATE: 0.05

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1000.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: S PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 10 INTERVAL: 29000.00 SEC

REQUIREMENTS: IOC GROWTH 1.00 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 1.00 KIPC 1.00/MN REPETITION RATE: 1.00/MN PROCESSOR MEMORY: PROGRAM SIZE: 4.00 KEYTES 4.00 KBYTES DATA REQUIREMENT: 5.00 KBYTES 5.00 KBYTES DATA STORAGE: SECONDARY: 0.00 KBYTES 0.00 KBYTES

0.00% IN 0.00HRS 0.00% IN 0.00HRS PERISHABILITY: 0.00 KBYTES ARCHIVAL: 0.00 KBYTES

\* OF DISPLAYS: 10 10

FUNCTION NO: 4.2.4.4 NAME: GREY WATER MANAGEMENT

DATA SOURCES: RFP

METHODOLOGY: RFP PLUS BACKGROUND EXPERIENCE

RESPONSE TIME: I/O DELAY ALLOWABLE:

60000.00 msec

COMMAND/CONTROL: LEVEL: A

LOCATION: O

RATE:

0.05

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1000.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: S

PHYSICAL LOCATION CODE: H

IOC

DIAGNOSTICS/SELF TEST: REQUIRED: Y

NUMBER: 10 INTERVAL:

29000.00 SEC

GROWTH

REQUIREMENTS: DATA PROCESSING INSTRUCTIONS PER CYCLE: REPETITION RATE:

1.00 KIPC 1.00/MN 4.00 KBYTES 1.00 KIPC 1.00/MN 4.00 KBYTES

PROCESSOR MEMORY: PROGRAM SIZE: DATA REQUIREMENT: DATA STORAGE: SECONDARY: PERISHABILITY:

5.00 KBYTES 0.00 KEYTES 0.00% IN 0.00HRS 0.00% IN 0.00HRS 0.00 KBYTES

5.00 KEYTES 0.00 KEYTES

ARCHIVAL: \* OF DISPLAYS: 10

0.00 KBYTES 10.

FUNCTION NO: 4.2.4.5 NAME: FIRE DETECTION AND CONTROL

DATA SOURCES: RFP

METHODOLOGY: RFP PLUS BACKGROUND EXPERIENCE

RESPONSE TIME: I/O DELAY ALLOWABLE:

10000.00 msec

COMMAND/CONTROL: LEVEL: A

LOCATION: O

RATE:

0.05

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1000.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: S

PHYSICAL LOCATION CODE: M

IOC

DIAGNOSTICS/SELF TEST: REQUIRED: Y

NUMBER: 15 INTERVAL: 29000.00 SEC

GROWTH

1.00/MN

1.00 KIPC

REQUIREMENTS: DATA PROCESSING INSTRUCTIONS PER CYCLE: REPETITION RATE: PROCESSOR MEMORY: PROGRAM SIZE: DATA REQUIREMENT: DATA STORAGE: SECONDARY:

PERISHABILITY: ARCHIVAL: \* OF DISPLAYS:

1.00 KIPC 1.00/MN 4.00 KBYTES 5.00 KBYTES 0.00 KBYTES 0.00% IN 0.00HRS 0.00% IN 0.00HRS 0.00 KBYTES

4.00 KEYTES 5.00 KBYTES 0.00 KEYTES

0.00 KEYTES 15 15

FUNCTION NO: 4.2.4.6 NAME: DEVICE MANAGEMENT

DATA SOURCES: F 4.2.2.2

METHODOLOGY: SIMILARITY ANALYSIS

RESPONSE TIME: I/O DELAY ALLOWABLE: 1000.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: O RATE: 0.01

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 0 INTERVAL: 30.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 500.00 KIPC 500.00 KIPC REPETITION RATE: 2.00/MN 2.00/MN PROCESSOR MEMORY: PROGRAM SIZE: 50.00 KEYTES 50.00 KBYTES DATA REQUIREMENT: 2.00 KBYTES 4.00 KBYTES DATA STORAGE: SECONDARY: 10.00 KBYTES 25.00 KBYTES PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

ARCHIVAL: 10.00 KBYTES 25.00 KBYTES

OF DISPLAYS: 10 15

FUNCTION NO: 4.2.4.7 NAME: COMMAND I/F PROCESSING - ECLSS

DATA SOURCES: F 5.1.2.3

METHODOLOGY: SIMILARITY ANALYSIS

RESPONSE TIME: I/O DELAY ALLOWABLE: 10000.00 msec

COMMAND/CONTROL: LEVEL: I LOCATION: O RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.50 KIPC 0.50 KIPC REPETITION RATE: 1.00/DA 1.00/DA PROCESSOR MEMORY: PROGRAM SIZE: 15.00 KBYTES 15.00 KBYTES DATA REQUIREMENT: 5.00 KBYTES 5.00 KBYTES DATA STORAGE: SECONDARY: 25.00 KBYTES 25.00 KEYTES PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

ARCHIVAL: 0.00 KBYTES 0.00 KBYTES \* OF DISPLAYS: 3 3

FUNCTION NO: 4.2.5.1 NAME: COMMUNICATION NETWORK CONTROL

DATA SOURCES: SS RFP, CRSS. SS REFERENCE CONFIGURATION

METHODOLOGY: REQUIREMENTS ASSESSMENT, COMMUNICATION SYSTEM DEVELOPMENT

EXPERIENCE. PEER CONSULTATION

RESPONSE TIME: I/O DELAY ALLOWABLE: 1.00 msec

COMMAND/CONTROL: LEVEL: AIM LOCATION: GIO RATE: 0.10

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.10 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 10.00 KIPC 15.00 KIPC 10.00/HR REPETITION RATE: 10.00/HR PROCESSOR MEMORY: PROGRAM SIZE: 35.00 KBYTES 50.00 KBYTES 10.00 KBYTES 15.00 KBYTES DATA REQUIREMENT: DATA STORAGE: SECONDARY: 0.00 KEYTES 0.00 KBYTES PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

ARCHIVAL: 0.00 KEYTES 0.00 KBYTES + OF DISPLAYS:

2 2

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FUNCTION NO: 4.2.5.1PNAME: COMMUNICATION NETWORK CONTROL

DATA SOURCES: SS RFP. CRSS. SS REFERENCE CONFIGURATION

METHODOLOGY: REQUIREMENTS ASSESSMENT, COMMUNICATION SYSTEM DEVELOPMENT

EXPERIENCE. PEER CONSULTATION

RESPONSE TIME: I/O DELAY ALLOWABLE: 1.00 msec

COMMAND/CONTROL: LEVEL: AIM LOCATION: GIO RATE: 0.10

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.10 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 10.00 KIPC .. 15.00 KIPC REPETITION RATE: 10.00/HR 10.00/HR PROCESSOR MEMORY: PROGRAM SIZE: 20.00 KBYTES 30.00 KEYTES

10.00 KBYTES 0.00 KBYTES DATA REQUIREMENT: 15.00 KBYTES DATA STORAGE: SECONDARY: 0.00 KBYTES

PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

ARCHIVAL: 0.00 KEYTES 0.00 KEYTES \* OF DISPLAYS:

G-131

FUNCTION NO: 4.2.5.2 NAME: COMMUNICATION EQUIPMENT CONTROL

DATA SOURCES: SS RFP, REF CONFIG.

METHODOLOGY: REQUIREMENTS ANALYSIS, EXPANSION OF REQUIREMENTS BASED

ON TECH. LITERATURE & EXPERIENCE. PEER CONSULTATION

RESPONSE TIME: I/O DELAY ALLOWABLE:

1.00 msec

COMMAND/CONTROL: LEVEL: AIM LOCATION

LOCATION: 0,G RATE: 0.10

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.10 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G

PHYSICAL LOGATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH
DATA PROCESSING INSTRUCTIONS PER CYCLE: 5.00 KIPC 7.00 KIPC
REPETITION RATE: 5.00/S 5.00/S

PROCESSOR MEMORY: PROGRAM SIZE: 15.00 KBYTES 25.00 KBYTES

DATA REQUIREMENT: 15.00 KBYTES 20.00 KBYTES

DATA STORAGE: SECONDARY: 256.00 KBYTES 256.00 KBYTES

DATA STORAGE: SECONDARY: 256.00 KBYTES 256.00 KBYTES PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS ARCHIVAL: 0.00 KBYTES 0.00 KBYTES

OF DISPLAYS:

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FUNCTION NO: 4.2.5.2PNAME: COMMUNICATION EQUIPMENT CONTROL

DATA SOURCES: SS RFP, REF CONFIG.

METHODOLOGY: REQUIREMENTS ANALYSIS, EXPANSION OF REQUIREMENTS BASED

ON TECH. LITERATURE & EXPERIENCE, PEER CONSULTATION

RESPONSE TIME: I/O DELAY ALLOWABLE: 1.00 msec

COMMAND/CONTROL: LEVEL: AIM LOCATION: 0,G RATE: 0.10

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.10 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 0 INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH
DATA PROCESSING INSTRUCTIONS PER CYCLE: 5.00 KIPC 7.00 KIPC
REPETITION RATE: 5.00/S 5.00/S

REPETITION RATE: 5.00/S 5.00/S
PROCESSOR MEMORY: PROGRAM SIZE: 10.00 KBYTES 15.00 KBYTES
DATA REQUIREMENT: 10.00 KBYTES 15.00 KBYTES

DATA STORAGE: SECONDARY: 64.00 KEYTES 64.00 KEYTES

PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS
ARCHIVAL: 0.00 KBYTES 0.00 KBYTES

\* OF DISPLAYS: 0 0

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SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.2.5.3 NAME: COMMUNICATION EQUIPMENT STATUS MONITORING

DATA SOURCES: CRSS, SS RFP, SS REF CONFIG., TECHNICAL PUBLICATIONS

METHODOLOGY: REQUIREMENTS ASSESSMENT, EXPERIENCE APPLICATION,

PEER CONSULTATION

RESPONSE TIME: I/O DELAY ALLOWABLE:

1000.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: O RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 10.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G

PHYSICAL LOCATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 0 INTERVAL: 60.00 SEC

IOC REQUIREMENTS: GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 2.00 KIPC 3.00 KIPC REPETITION RATE: 1.00/S 1.00/S PROCESSOR MEMORY: PROGRAM SIZE: 50.00 KBYTES 70.00 KBYTES DATA REQUIREMENT: 15.00 KBYTES 25.00 KBYTES DATA STORAGE: SECONDARY: 512.00 KBYTES

 STORAGE:
 SECONDARY:
 512.00 KBYTES
 512.00 KBYTES

 PERISHABILITY:
 100.00% IN 2.00HRS100.00% IN 2.00HRS

 ARCHIVAL:
 50000.00 KBYTES
 50000.00 KBYTES

OF DISPLAYS: 0 0

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SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.2.5.3PNAME: COMMUNICATION EQUIPMENT STATUS MONITORING

DATA SOURCES: CRSS, SS RFP, SS REF CONFIG., TECHNICAL PUBLICATIONS

METHODOLOGY: REQUIREMENTS ASSESSMENT, EXPERIENCE APPLICATION.

PEER CONSULTATION

RESPONSE TIME: I/O DELAY ALLOWABLE:

1000.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: O RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 10.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 0 INTERVAL: 60.00 SEC

REQUIREMENTS: IOC GROWTH
DATA PROCESSING INSTRUCTIONS PER CYCLE: 2.00 KIPC 5.00 KIPC
REPETITION RATE: 1.00/S 1.00/S

PROCESSOR MEMORY: PROGRAM SIZE: 25.00 KBYTES 35.00 KBYTES DATA REQUIREMENT: 15.00 KBYTES 25.00 KBYTES

DATA STORAGE: SECONDARY: 128.00 KBYTES 128.00 KBYTES PERISHABILITY: 100.00% IN 2.00HRS100.00% IN 2.00HRS

ARCHIVAL: 5000.00 KEYTES 5000.00 KEYTES

O O

FUNCTION NO: 4.2.5.4 NAME: FAILURE DETECTION & RECOVERY

DATA SOURCES:

METHODOLOGY: REQUIREMENTS ANALYSIS, EXPERIENCE APPLICATION.

PEER CONSULTATION

RESPONSE TIME: I/O DELAY ALLOWABLE:

10.00 msec

COMMAND/CONTROL: LEVEL: A,I LOCATION: O.G RATE: 0.10

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 0 INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH
DATA PROCESSING INSTRUCTIONS PER CYCLE: 10.00 KIPC 20.00 KIPC
REPETITION RATE: 1.00/S 1.00/S
PROCESSOR MEMORY: PROGRAM SIZE: 50.00 KEYTES 100.00 KEYTES
DATA REQUIREMENT: 64.00 KEYTES 120.00 KEYTES

DATA STORAGE: SECONDARY: 512.00 KBYTES 512.00 KBYTES
PERISHABILITY: 100.00% IN 2.00HRS100.00% IN 2.00HRS
ARCHIVAL: 10000.00 KBYTES 10000.00 KBYTES

OF DISPLAYS:

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FUNCTION NO: 4.2.5.4PNAME: FAILURE DETECTION & RECOVERY

DATA SOURCES:

METHODOLOGY: REQUIREMENTS ANALYSIS, EXPERIENCE APPLICATION,

PEER CONSULTATION

RESPONSE TIME: I/O DELAY ALLOWABLE: 10.00 msec

COMMAND/CONTROL: LEVEL: A,I LOCATION: O,G RATE: 0.10

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 0 INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH
DATA PROCESSING INSTRUCTIONS PER CYCLE: 10.00 KIPC 20.00 KIPC

REPETITION RATE: 1.00/S 1.00/S
PROCESSOR MEMORY: PROGRAM SIZE: 25.00 KBYTES 50.00 KBYTES

DATA REQUIREMENT: 64.00 KBYTES 64.00 KBYTES
DATA STORAGE: SECONDARY: 128.00 KBYTES 128.00 KBYTES

PERISHABILITY: 100.00% IN 2.00HRS100.00% IN 2.00HRS
ARCHIVAL: 10000.00 KBYTES 10000.00 KBYTES

# OF DISPLAYS: 10000.00 KBYTES 10000.00 KBYTE

FUNCTION NO: 4.2.5.5 NAME: COMMAND PROCESSING

DATA SOURCES: CRSS, SS REF CONF.SS

METHODOLOGY: REQUIREMENTS ASSESSMENT & EVALUATION

RESPONSE TIME: I/O DELAY ALLOWABLE:

1.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: O RATE: 0.10

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.10 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 0 INTERVAL: 10.00 SEC

REQUIREMENTS: IOC GROWTH
DATA PROCESSING INSTRUCTIONS PER CYCLE: 1.00 KIPC 1.50 KIPC
REPETITION RATE: 10.00/S 10.00/S

PROCESSOR MEMORY: PROGRAM SIZE: 5.00 KBYTES 10.00 KBYTES

DATA REQUIREMENT: 2.00 KBYTES 4.00 KBYTES

DATA STORAGE: SECONDARY: 0.00 KBYTES 0.00 KBYTES

DATA STORAGE: SECONDARY: 0.00 KBYTES 0.00 KBYTES
PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS
ARCHIVAL: 0.00 KBYTES 0.00 KBYTES

OF DISPLAYS: 0 0

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.2.5.5PNAME: COMMAND PROCESSING

DATA SOURCES: CRSS.SS REF CONF.SS

METHODOLOGY: REQUIREMENTS ASSESSMENT & EVALUATION

RESPONSE TIME: I/O DELAY ALLOWABLE: 1.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: O RATE: 0.10

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.10 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 0 INTERVAL: 10.00 SEC

REQUIREMENTS: IOC GROWTH
DATA PROCESSING INSTRUCTIONS PER CYCLE: 1.00 KIPC 1.50 KIPC

REPETITION RATE: 10.00/S 10.00/S
PROCESSOR MEMORY: PROGRAM SIZE: 5.00 KBYTES 5.00 KBYTES

DATA REQUIREMENT: 2.00 KBYTES 2.00 KBYTES
DATA STORAGE: SECONDARY: 0.00 KBYTES 0.00 KBYTES

PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS
ARCHIVAL: 0.00 KBYTES 0.00 KBYTES

**OP DISPLAYS:** 

SSDS FUNCTIONAL DATA SHEET 20-JUL-1985

FUNCTION NO: 4.2.5.6 NAME: COMMUNICATION INTERFACE CONTROL

DATA SOURCES: SEE SHEET

METHODOLOGY: REQUIREMENTS ASSESSMENT & EVALUATION

RESPONSE TIME: I/O DELAY ALLOWABLE: 1.00 msec

LOCATION: O RATE: 0.10 COMMAND/CONTROL: LEVEL: A

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.10 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: PHYSICAL LOCATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: O INTERVAL: 10.00 SEC

IOC 0.50 KIPC GROWTH REQUIREMENTS: DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.60 KIPC REPETITION RATE: 10.00/S 10.00/S PROCESSOR MEMORY: PROGRAM SIZE: 5.00 KBYTES 6.00 KBYTES 3.00 KBYTES DATA REQUIREMENT:

2.00 KEYTES DATA STORAGE: SECONDARY: 0.00 KEYTES 0.00 KBYTES 0.00% IN 0.00HRS 0:00% IN 0.00HRS

PERISHABILITY:
ARCHIVAL: 0.00 KEYTES 0.00 KEYTES

\* OF DISPLAYS: 0 0

SSDS FUNCTIONAL DATA SHEET 20-JUL-1985

FUNCTION NO: 4.2.5.6PNAME: COMMUNICATION INTERFACE CONTROL

DATA SOURCES: SEE SHEET

METHODOLOGY: REQUIREMENTS ASSESSMENT & EVALUATION

RESPONSE TIME: I/O DELAY ALLOWABLE: 1.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: O RATE: 0.10

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.10 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: PHYSICAL LOCATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: O INTERVAL: 10.00 SEC

IOC REQUIREMENTS: GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.50 KIPC 0.60 KIPC REPETITION RATE: 10.00/S

10.00/S 5.00 KBYTES 2.00 KBYTES PROCESSOR MEMORY: PROGRAM SIZE: 5.00 KBYTES DATA REQUIREMENT: 2.00 KBYTES

DATA STORAGE: SECONDARY: 0.00 KBYTES 0.00 KBYTES PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

ARCHIVAL: O.OO KEYTES 0.00 KEYTES \* OF DISPLAYS: 0 0

FUNCTION NO: 4.2.5.7 NAME: TELEMETRY CONTROL

DATA SOURCES: CRSS SS RFP, SS REF CONFIG, TECHNICAL LITERATURE

METHODOLOGY: REQUIREMENTS EVALUATION, EXPERIENCE APPLICATION.

PEER CONSULTATION

RESPONSE TIME: I/O DELAY ALLOWABLE:

1.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: O RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G

PHYSICAL LOCATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 0 INTERVAL: 10.00 SEC

REQUIREMENTS: IOC GROWTH

DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.00 KIPC 0.00 KIPC

REPETITION RATE: 4.00/MS 4.00/MS

PROCESSOR MEMORY: PROGRAM SIZE: 5.00 KEYTES 10.00 KEYTES

DATA REQUIREMENT: 5.00 KEYTES 7.00 KEYTES

DATA STORAGE: SECONDARY: 20.00 KBYTES 40.00 KBYTES
PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS
ARCHIVAL: 0.00 KBYTES 0.00 KBYTES

OF DISPLAYS:

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.2.5.7PNAME: TELEMETRY CONTROL

DATA SOURCES: CRSS SS RFP, SS REF CONFIG. TECHNICAL LITERATURE

METHODOLOGY: REQUIREMENTS EVALUATION. EXPERIENCE APPLICATION.

PEER CONSULTATION

RESPONSE TIME: I/O DELAY ALLOWABLE: 1.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: 0 RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 0 INTERVAL: 10.00 SEC

REQUIREMENTS: IOC GROWTH
DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.00 KIPC 0.00 KIPC
REPETITION RATE: 4.00/MS 4.00/MS

PROCESSOR MEMORY: PROGRAM SIZE: 5.00 KBYTES 5.00 KBYTES

DATA REQUIREMENT: 5.00 KBYTES 5.00 KBYTES

DATA STORAGE: SECONDARY: 20.00 KBYTES 20.00 KBYTES

DATA STORAGE: SECONDARY: 20.00 KBYTES 20.00 KBYTES

PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

ARCHIVAL: 0.00, KBYTES 0.00 KBYTES

# OF DISPLAYS: 0.00 KEYTES 0.00 KEYTES

O 0 0

FUNCTION NO: 4.3.1.1 NAME: CREW PHYSIOLOGICAL MONITORING

DATA SOURCES: NASA-TM58248, NASA-T

**METHODOLOGY:** 

RESPONSE TIME: I/O DELAY ALLOWABLE: 1000.00 msec

COMMAND/CONTROL: LEVEL: I LOCATION: O RATE: 10000.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: 0 INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH 0.40 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.40 KIPC REPETITION RATE: 6.00/MN 6.00/MN PROCESSOR MEMORY: PROGRAM SIZE: 5.00 KEYTES 7.00 KBYTES DATA REQUIREMENT: 2.00 KEYTES 3.00 KBYTES DATA STORAGE: SECONDARY: 20.00 KBYTES 25.00 KBYTES PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

ARCHIVAL: 60.00 KEYTES 100.00 KEYTES

\* OF DISPLAYS: 3

C-6

FUNCTION NO: 4.3.1.2 NAME: MEDICAL DIAGNOSTICS SUPPORT

DATA SOURCES: NASA-TM58248, NASA-TM 58255

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE:

10000.00 msec

COMMAND/CONTROL: LEVEL: I

LOCATION: O

RATE: 400.00

DATA QUALITY: MAXIMUM BIT ERROR RATE:

0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: N

PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: N

NUMBER: O INTERVAL:

0.00 SEC

15.00 KBYTES

7.00 KBYTES

REQUIREMENTS: DATA PROCESSING INSTRUCTIONS PER CYCLE: REPETITION RATE: PROCESSOR MEMORY: PROGRAM SIZE:

DATA REQUIREMENT: DATA STORAGE: SECONDARY: PERISHABILITY:

ARCHIVAL: \* OF DISPLAYS: IOC GROWTH 1.00 KIPC 1.50 KIPC 6.00/HR 6.00/HR

10.00 KEYTES 5.00 KEYTES 20.00 KEYTES

40.00 KBYTES

2

30.00 KBYTES 0.00% IN 0.00HRS 0.00% IN 0.00HRS 60.00 KEYTES

SSDS FUNCTIONAL DATA SHEET 20-JUL-1985

FUNCTION NO: 4.3.1.3 NAME: TREATMENT SUPPORT

DATA SOURCES: NASA-TM 58248, NASA-TM 58255

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE:

10000.00 msec

LOCATION: O RATE: 100.00 COMMAND/CONTROL: LEVEL: I

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

IOC GROWTH REQUIREMENTS: 1.00 KIPC 1.50 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: REPETITION RATE: 1.00/MM 1.00/MN PROCESSOR MEMORY: PROGRAM SIZE: 5.00 KBYTES 7.00 KBYTES DATA REQUIREMENT: 3.00 KEYTES 5.00 KBYTES DATA STORAGE: SECONDARY: 15.00 KBYTES 22.00 KBYTES

PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS ARCHIVAL: 60.00 KBYTES

40.00 KEYTES \* OF DISPLAYS:

FUNCTION NO: 4.3.1.4 NAME: NUTRITION ANALYSIS

DATA SOURCES: NASA-TM58248/58255

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE: 10000.00 msec

COMMAND/CONTROL: LEVEL: I LOCATION: O RATE: 20.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: N PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 2.00 KIPC 3.00 KIPC 15.00/DAY REPETITION RATE: 10.00/DAY 6.00 KEYTES 6.00 KEYTES PROCESSOR MEMORY: PROGRAM SIZE: 8.00 KBYTES DATA REQUIREMENT: 8.00 KBYTES DATA STORAGE: SECONDARY: 15.00 KBYTES 20.00 KBYTES

PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS ARCHIVAL: 20.00 KEYTES 30.00 KBYTES \* OF DISPLAYS: 3

FUNCTION NO: 4.3.1.5 NAME: EXERCISE PLANNER

DATA SOURCES: NASA-TM58248, NASA-TM58255

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE:

10000.00 msec

COMMAND/CONTROL: LEVEL: I

LOCATION: O

RATE:

10.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: N

PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: N

NUMBER: O INTERVAL:

0.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 3.00 KIPC 4.00 KIPC REPETITION RATE: 10.00/DAY 10.00/DAY PROCESSOR MEMORY: PROGRAM SIZE: 10.00 KBYTES 15.00 KBYTES DATA REQUIREMENT: 5.00 KBYTES 7.00 KBYTES DATA STORAGE: SECONDARY: 20.00 KBYTES 25.00 KBYTES PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS ARCHIVAL: 30.00 KBYTES

# OF DISPLAYS:

3

37.00 KEYTES

FUNCTION NO: 4.3.1.6 NAME: PHYSIOLOGICAL DATA TRANSFORMATION & ANALYSIS

DATA SOURCES: NASA-TM 58248, NASA-TM58255

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE:

10.00 msec

O INTERVAL:

COMMAND/CONTROL: LEVEL: I

LOCATION: O

RATE: 400.00

0.00 SEC

DATA QUALITY: MAXIMUM BIT ERROR RATE:

0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I

PHYSICAL LOCATION CODE: H

NUMBER:

DIAGNOSTICS/SELF TEST: REQUIRED: N

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 5.00 KIPC 7.00 KIPC REPETITION RATE: 5.00/DAY 5.00/DAY PROCESSOR MEMORY: PROGRAM SIZE: 20.00 KBYTES 25.00 KBYTES DATA REQUIREMENT: 5.00 KBYTES 7.00 KBYTES DATA STORAGE: SECONDARY: 30.00 KBYTES 35.00 KBYTES PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

ARCHIVAL: 30.00 KBYTES 35.00 KBYTES

\* OF DISPLAYS: 3 3

FUNCTION NO: 4.3.1.7 NAME: COMMAND I/F PROCESSING - COMM

DATA SOURCES: F 5.1.3.2

METHODOLOGY: SIMILARITY ANALYSIS

RESPONSE TIME: I/O DELAY ALLOWABLE:

10000.00 msec

COMMAND/CONTROL: LEVEL: I

LOCATION: O

RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE:

1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I

PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: N

NUMBER: O INTERVAL:

0.00 SEC

GROWTH

20.00/DA

0.10 KIPC

0.40 KBYTES

REQUIREMENTS: IOC DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.05 KIPC REPETITION RATE: 10.00/DA PROCESSOR MEMORY: PROGRAM SIZE: DATA REQUIREMENT:

DATA STORAGE: SECONDARY: PERISHABILITY: ARCHIVAL: \* OF DISPLAYS:

0.20 KBYTES 0.10 KBYTES 1.00 KEYTES 0.00% IN 0.00HRS 0.00% IN 0.00HRS 0.00 KEYTES

0.20 KBYTES 2.00 KBYTES

0.00 KBYTES 3 3

FUNCTION NO: 4.3.2.1 NAME: CAUTIONS AND WARNINGS

DATA SOURCES: RFP, CRSS

METHODOLOGY: MISSION OPERATIONAL & SUBSYSTEM

REQUIREMENTS ANALYSIS

RESPONSE TIME: I/O DELAY ALLOWABLE: 100.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: O RATE: 8.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH: -

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: T

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 1 INTERVAL: 25000.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.10 KIPC 0.10 KIPC 1.00/DA REPETITION RATE: 0.10/ PROCESSOR MEMORY: PROGRAM SIZE: 2.00 KBYTES 4.00 KBYTES DATA REQUIREMENT: 0.50 KBYTES 1.00 KBYTES DATA STORAGE: SECONDARY: 0.00 KEYTES 0.00 KBYTES

PERISHABILITY: 0.00 KBITES 0.00 KBITES

PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

ARCHIVAL: 0.00 KBYTES 0.00 KBYTES

\* OF DISPLAYS: 1

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.3.2.1PNAME: CAUTIONS AND WARNINGS

DATA SOURCES: RFP, CRSS

METHODOLOGY: MISSION OPERATIONAL & SUBSYSTEM

REQUIREMENTS ANALYSIS

RESPONSE TIME: I/O DELAY ALLOWABLE: 100.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: O RATE: 8.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH: - 0

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: T

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 1 INTERVAL: 25000.00 SEC

REQUIREMENTS: IOC GROWTH

DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.10 KIPC 0.10 KIPC
REPETITION RATE: 1.00/DA 1.00/DA
PROCESSOR MEMORY: PROGRAM SIZE: 2.00 KBYTES 3.00 KBYTE

PROCESSOR MEMORY: PROGRAM SIZE: 2.00 KBYTES 3.00 KBYTES
DATA REQUIREMENT: 0.50 KBYTES 1.00 KBYTES

DATA STORAGE: SECONDARY: 0.00 KBYTES 0.00 KBYTES PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

ARCHIVAL: 0.00 KBYTES 0.00 KBYTES

+ OF DISPLAYS: 1

FUNCTION NO: 4.3.2.2 NAME: ABNORMAL AND EMERGENCY PROCEDURES

DATA SOURCES: RFP.CRSS

METHODOLOGY: MISSION, OPERATIONS, SUBSYSTEMS, AND

CREW INTERFACE ANALYSIS

RESPONSE TIME: I/O DELAY ALLOWABLE: 200.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: O RATE: 16.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH: -

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: T

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 4 INTERVAL: 25000.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.30 KIPC 0.60 KIPC REPETITION RATE: 1.00/DA 0.10/DA PROCESSOR MEMORY: PROGRAM SIZE: 4.00 KBYTES 8.00 KBYTES 1.00 KEYTES DATA REQUIREMENT: 2.00 KBYTES DATA STORAGE: SECONDARY:
PERISHABILITY:
ARCHIVAL: 0.00 KBYTES 0.00 KBYTES

0.00% IN 0.00HRS 0.00% IN 0.00HRS 0.00 KBYTES 0.00 KBYTES

\* OF DISPLAYS: 1000 2000

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.3.2.2PNAME: ABNORMAL AND EMERGENCY PROCEDURES

DATA SOURCES: RFP.CRSS

METHODOLOGY: MISSION, OPERATIONS, SUBSYSTEMS, AND

CREW INTERFACE ANALYSIS

RESPONSE TIME: I/O DELAY ALLOWABLE: 200.00 msec

RATE: 16.00 COMMAND/CONTROL: LEVEL: A LOCATION: 0

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

0 SYNCHRONIZATION WITH: -

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: T

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 4 INTERVAL: 25000.00 SEC

REQUIREMENTS: IOC GROWTH 0.30 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.60 KIPC REPETITION RATE: 1.00/DA 0.10/DA PROCESSOR MEMORY: PROGRAM SIZE: 4.00 KBYTES 8.00 KBYTES

DATA REQUIREMENT:
DATA STORAGE: SECONDARY:
PERISHABILITY: 0.00 KBYTES 2.00 KBYTES 0.00 KBYTES

0.00% IN 0.00HRS 0.00% IN 0.00HRS O.OO KBYTES

ARCHIVAL: O.OO KEYTES \* OF DISPLAYS: 10 20

FUNCTION NO: 4.3.2.3 NAME: AUTOMATIC CONTROL PROCESSING

DATA SOURCES: RFP

METHODOLOGY: SUBSYSTEM, SAFETY, AND CREW INTERFACE

ANALYSIS

RESPONSE TIME: I/O DELAY ALLOWABLE: 50.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: O RATE: 800.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH: 0

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: T

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 11 INTERVAL: 10000.00 SEC

· IOC REQUIREMENTS: GROWTH . 0.20 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.40 KIPC REPETITION RATE: 0.10/DA 0.10/DA PROCESSOR MEMORY: PROGRAM SIZE: 20.00 KBYTES 40.00 KBYTES DATA REQUIREMENT: 5.00 KEYTES 15.00 KBYTES DATA STORAGE: SECONDARY: 200.00 KEYTES 400.00 KEYTES PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

ARCHIVAL: 0.00 KBYTES 0.00 KBYTES

OF DISPLAYS: 0 0

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.3.2.3PNAME: AUTOMATIC CONTROL PROCESSING

DATA SOURCES: RFP

METHODOLOGY: SUBSYSTEM, SAFETY, AND CREW INTERFACE

ANALYSIS

RESPONSE TIME: I/O DELAY ALLOWABLE: 50.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: O RATE: 800.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH: 0

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: T

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 11 INTERVAL: 10000.00 SEC

REQUIREMENTS: IOC GROWTH
DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.20 KIPC 0.40 KIPC

DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.20 KIPC 0.40 KIPC REPETITION RATE: 0.10/DA 0.10/DA PROCESSOR MEMORY: PROGRAM SIZE: 5.00 KEYTES 10.00 KEYTES

DATA REQUIREMENT: 2.00 KBYTES 8.00 KBYTES
DATA STORAGE: SECONDARY: 100.00 KBYTES 200.00 KBYTES

PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS
ARCHIVAL: 0.00 KBYTES 0.00 KBYTES

0

OF DISPLAYS: 0 0

20-JUL-1985

SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.3.2.4 NAME: COMMAND INTERFACE PROCESSING

DATA SOURCES: RFP.CRSS

METHODOLOGY: SUBSYSTEM, SAFETY, AND CREW INTERFACE

ANALYSIS

RESPONSE TIME: I/O DELAY ALLOWABLE:

200.00 msec

COMMAND/CONTROL: LEVEL: M LOCATION: O RATE: 80.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.20 KIPC 0.20 KIPC REPETITION RATE: 1.00/DA 0.10/DA PROCESSOR MEMORY: PROGRAM SIZE: 4.00 KBYTES 4.00 KBYTES DATA REQUIREMENT: 0.00 KBYTES O.OO KBYTES DATA STORAGE: SECONDARY: 0.00 KBYTES 0.00 KEYTES PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

ARCHIVAL: 0.00 KEYTES 0.00 KBYTES \* OF DISPLAYS: 0 0

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.3.2.4PNAME: COMMAND INTERFACE PROCESSING

DATA SOURCES: RFP, CRSS

METHODOLOGY: SUBSYSTEM, SAFETY: AND CREW INTERFACE

ANALYSIS

RESPONSE TIME: I/O DELAY ALLOWABLE: 200.00 msec

COMMAND/CONTROL: LEVEL: M LOGATION: O RATE: 80.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH 0.20 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.20 KIPC

REPETITION RATE: 1.00/DA 0.10/DA PROCESSOR MEMORY: PROGRAM SIZE: 4.00 KBYTES 4.00 KBYTES DATA REQUIREMENT:

0.00 KBYTES 0.00 KBYTES DATA STORAGE: SECONDARY: 0.00 KBYTES 0.00 KBYTES

PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS 0.00 KEYTES ARCHIVAL: 0.00 KBYTES

# OF DISPLAYS: 0 0

FUNCTION NO: 4.3.3.1 NAME: RECREATION SERVICES

DATA SOURCES: RFP

METHODOLOGY: CREW CHOICE ANALYSIS,

CREW SCHEDULE ANALYSIS

RESPONSE TIME: I/O DELAY ALLOWABLE:

2000.00 msec

RATE:

0.00

COMMAND/CONTROL: LEVEL: M LOCATION: O

DATA QUALITY: MAXIMUM BIT ERROR RATE: 10.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: N 0.00 SEC NUMBER: O INTERVAL:

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.20 KIPC 0.10 KIPC REPETITION RATE: 10.00/DA 10.00/DA PROCESSOR MEMORY: PROGRAM SIZE: 4.00 KEYTES 8.00 KEYTES DATA REQUIREMENT: 4.00 KBYTES 8.00 KBYTES DATA STORAGE: SECONDARY: 20.00 KEYTES 40.00 KBYTES PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS ARCHIVAL: 100.00 KEYTES 200.00 KBYTES

\* OF DISPLATS: 5 5

20-JUL-1985

SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.3.3.2 NAME: CREW/GROUND COMMUNICATION

DATA SOURCES: RFP

METHODOLOGY: CREW TASK ANALYSIS

RESPONSE TIME: I/O DELAY ALLOWABLE:

2000.00 msec

COMMAND/CONTROL: LEVEL: M

LOCATION: 0

RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 10.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G

PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER:

O INTERVAL:

0.00 SEC

REQUIREMENTS: DATA PROCESSING INSTRUCTIONS PER CYCLE: IOC

GROWTH

0.10 KIPC 6.00/DA

0.20 KIPC 6.00/DA

REPETITION RATE: PROCESSOR MEMORY: PROGRAM SIZE:

0.40 KBYTES

1.00 KEYTES 0.80 KBYTES

DATA REQUIREMENT: DATA STORAGE: SECONDARY:

0.40 KBYTES 0.00 KBYTES

0.00 KBYTES

PERISHABILITY: ARCHIVAL:

0.00 KEYTES

0.00% IN 0.00HRS 0.00% IN 0.00HRS O.OO KBYTES

+ OF DISPLAYS:

5

5

G-150

FUNCTION NO: 4.3.3.3 NAME: COMMAND INTERFACE PROCESSING

DATA SOURCES: F 5.1.3.2

METHODOLOGY: SIMILARITY ANALYSIS

RESPONSE TIME: I/O DELAY ALLOWABLE: 10000.00 msec

COMMAND/CONTROL: LEVEL: I LOCATION: O RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.05 KIPC 0.05 KIPC 10.00/HR REPETITION RATE: 20.00/HR PROCESSOR MEMORY: PROGRAM SIZE: 0.20 KBYTES 0.40 KBYTES DATA REQUIREMENT: 0.10 KBYTES 0.20 KBYTES DATA STORAGE: SECONDARY: 1.00 KEYTES 2.00 KBYTES PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS 0.00 KBYTES 0.00 KBYTES ARCHIVAL:

\* OF DISPLATS: 1 2

FUNCTION NO: 4.3.4.1 NAME: EMU CONTAMINATION CONTROL

DATA SOURCES: REP

METHODOLOGY: RFP REQUIREMENTS; SSDS INTERFACES BY COMMON

RESPONSE TIME: I/O DELAY ALLOWABLE: 20000.00 msec

COMMAND/CONTROL: LEVEL: I LOCATION: O RATE: 0.05

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1000.00 E -6

SYNCHRONIZATION WITH: 0

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: N

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 5 INTERVAL: 29000.00 SEC

IOC 1.00 KIPC REQUIREMENTS: GROWTH 1.00 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 10.00/DA REPETITION RATE: 20.00/DA PROCESSOR MEMORY: PROGRAM SIZE: 1.00 KBYTES 1.00 KEYTES DATA REQUIREMENT: 0.50 KBYTES 0.50 KBYTES DATA STORAGE: SECONDARY:
PERISHABILITY:
ARCHIVAL: 2.00 KEYTES 2.00 KBYTES 0.00% IN 0.00HRS 0.00% IN 0.00HRS

10.00 KBYTES 10.00 KEYTES

\* OF DISPLAYS: 2 2

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.3.4.10NAME: COMMAND INTERFACE PROCESSING

DATA SOURCES: F 5.1.2.3

METHODOLOGY: SIMILARITY ANALYSIS

RESPONSE TIME: I/O DELAY ALLOWABLE: 10000.00 msec

COMMAND/CONTROL: LEVEL: I LOCATION: O RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL:

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.50 KIPC 0.50 KIPC REPETITION RATE: 6.00/HR

6.00/HR PROCESSOR MEMORY: PROGRAM SIZE: 15.00 KEYTES 5.00 KEYTES 20.00 KBYTES DATA REQUIREMENT: 7.00 KBYTES

DATA STORAGE: SECONDARY: 25.00 KBYTES 25.00 KBYTES PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS ARCHIVAL: 0.00 KBYTES 0.00 KBYTES

\* OF DISPLAYS: 3 3

FUNCTION NO: 4.3.4.2 NAME: EMU MONITOR AND MAINTENANCE

DATA SOURCES: RFP

METHODOLOGY: RFP REQUIREMENTS

RESPONSE TIME: I/O DELAY ALLOWABLE: 60000.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: O RATE: 0.01

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1000.00 E -6

SYNCHRONIZATION WITH: 0

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: N

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 6 INTERVAL: 29000.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.10 KIPC 0.10 KIPC REPETITION RATE: 1.40/DA 2.90/DA PROCESSOR MEMORY: PROGRAM SIZE: 50.00 KEYTES 60.00 KBYTES DATA REQUIREMENT: 2.00 KBYTES 4.00 KBYTES DATA STORAGE: SECONDARY: 20.00 KBYTES 20.00 KBYTES 0.00% IN 0.00HRS 0.00% IN 0.00HRS PERISHABILITY:

ARCHIVAL: 0.00 KBYTES 0.00 KBYTES

• OF DISPLAYS: 1 1

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SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.3.4.3 NAME: MMU MONITOR AND MAINTENANCE

DATA SOURCES:

METHODOLOGY: RFP REQUIREMENTS

RESPONSE TIME: I/O DELAY ALLOWABLE:

60000.00 msec

COMMAND/CONTROL: LEVEL: A

LOCATION: O

RATE: 0.01

1

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1000.00 E -6

0

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I

PHYSICAL LOCATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 6 INTERVAL: 29000.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.10 KIPC 0.10 KIPC REPETITION RATE: 1.40/DA 2.90/DA PROCESSOR MEMORY: PROGRAM SIZE: 20.00 KEYTES 30.00 KBYTES DATA REQUIREMENT: 1.00 KBYTES 2.00 KBYTES DATA STORAGE: SECONDARY: 10.00 KBYTES 10.00 KBYTES ARCHIVAL: PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS 0.00 KBYTES 0.00 KBYTES \* OF DISPLAYS: 1

SSDS FUNCTIONAL DATA SHEET 20-JUL-1985

FUNCTION NO: 4.3.4.4 NAME: SAFETY INTERLOCK MONITOR & CONTROL

DATA SOURCES: RFP

METHODOLOGY: RFP REQUIREMENTS; SSDS INTERFACES BY COMMON SENSE

RESPONSE TIME: I/O DELAY ALLOWABLE: 100.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: 0 RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 10.00 E -6

SYNCHRONIZATION WITH: 0

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: D

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 3 INTERVAL: 86400.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 1.00 KIPC 1.00 KIPC 2.00/HR REPETITION RATE: 1.00/HR PROCESSOR MEMORY: PROGRAM SIZE: 1.00 KEYTES 2.00 KEYTES DATA REQUIREMENT: 0.50 KEYTES 1.00 KBYTES DATA STORAGE: SECONDARY: 0.50 KEYTES 0.50 KBYTES PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

ARCHIVAL: 0.00 KBYTES 0.00 KBYTES \* OF DISPLAYS: 1

FUNCTION NO: 4.3.4.5 NAME: EVA REAL TIME MONITOR & CONTROL

DATA SOURCES: RFP

METHODOLOGY: RFP REQUIREMENTS; SSDS INTERFACES BY COMMON SENSE

RESPONSE TIME: I/O DELAY ALLOWABLE: 1000.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: O RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1000.00 E -6

SYNCHRONIZATION WITH: 4.3.4.2

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 5 INTERVAL: 29000.00 SEC

IOC REQUIREMENTS: GROWTH 0.01 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.01 KIPC 1.00/MIN REPETITION RATE: 1.00/MN PROCESSOR MEMORY: PROGRAM SIZE: 2.00 KEYTES 4.00 KBYTES DATA REQUIREMENT: 1.00 KEYTES 2.00 KBYTES DATA STORAGE: SECONDARY: 1.00 KEYTES 1.00 KBYTES PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

ARCHIVAL: 0.00 KBYTES 0.00 KEYTES \* OF DISPLAYS: 1 1

FUNCTION NO: 4.3.4.6 NAME: EVA VISUAL INFORMATION

DATA SOURCES: RFP

METHODOLOGY: RFP REQUIREMENTS; PROCEDURES FROM FUNCTION 4.3.5

RESPONSE TIME: I/O DELAY ALLOWABLE: 30000.00 msec

COMMAND/CONTROL: LEVEL: I LOCATION: O RATE: 100.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 100.00 E -6

SYNCHRONIZATION WITH:

PHYSICAL LOCATION CODE: H SYSTEM DEPENDENCY CODE: I

DIAGNOSTICS/SELF TEST: REQUIRED: Y 86400.00 SEC NUMBER: 1 INTERVAL:

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 10.00 KIPC 10.00 KIPC REPETITION RATE: 10.00/S 10.00/S PROCESSOR MEMORY: PROGRAM SIZE: 50.00 KBYTES 75.00 KBYTES DATA REQUIREMENT: 10.00 KBYTES 15.00 KBYTES DATA STORAGE: SECONDARY: 10.00 KEYTES 10.00 KBYTES PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

60.00 KBYTES 60.00 KEYTES ARCHIVAL: + OF DISPLAYS: 2 2

FUNCTION NO: 4.3.4.7 NAME: AIRLOCK ATM. PRESS. & COMP. CO

DATA SOURCES: RFP

METHODOLOGY: RFP REQUIREMENTS

RESPONSE TIME: I/O DELAY ALLOWABLE:

1000.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: 0 **RATE:** 0.01

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1000.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: N

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 5 INTERVAL: 29000.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.01 KIPC 0.01 KIPC REPETITION RATE: 3.00/MN 3.00/MN PROCESSOR MEMORY: PROGRAM SIZE: 2.00 KBYTES 2.00 KBYTES DATA REQUIREMENT: 0.50 KBYTES 0.50 KEYTES DATA STORAGE: SECONDARY: 0.50 KBYTES 0.50 KBYTES PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS ARCHIVAL: 0.00 KBYTES O.OO KEYTES

\* OF DISPLAYS: 1

1

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SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.3.4.8 NAME: AIRLOCK TEMP & HUM. CONTROL

DATA SOURCES: RFP

METHODOLOGY: RFP REQUIREMENTS

RESPONSE TIME: I/O DELAY ALLOWABLE:

1000.00 msec

COMMAND/CONTROL: LEVEL: A LOCA

LOCATION: O RATE:

0.01

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1000.00 E -6

SYNCHRONIZATION WITH:

Ω

SYSTEM DEPENDENCY CODE: I

PHYSICAL LOCATION CODE: N

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 3 INTERVAL: 29000.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.01 KIPC 0.01 KIPC REPETITION RATE: 3.00/MN 3.00/MN 1.00 KEYTES 0.50 KEYTES 0.50 KEYTES PROCESSOR MEMORY: PROGRAM SIZE: 1.00 KBYTES DATA REQUIREMENT: 0.50 KBYTES DATA STORAGE: SECONDARY: 0.50 KBYTES PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS ARCHIVAL: 0.00 KEYTES 0.00 KBYTES

FUNCTION NO: 4.3.4.9 NAME: DEVICE MANAGEMENT

DATA SOURCES: 4.2.2.2

METHODOLOGY: SIMILARITY ANALYSIS

RESPONSE TIME: I/O DELAY ALLOWABLE: 1000.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: 0 RATE: 0.01

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: T

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 0 INTERVAL: 30.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 50.00 KIPC 75.00 KIPC REPETITION RATE: 30.00/MN 30.00/MN PROCESSOR MEMORY: PROGRAM SIZE: 15.00 KEYTES 20.00 KBYTES DATA REQUIREMENT: 1.00 KBYTES 2.00 KBYTES DATA STORAGE: SECONDARY: 2.00 KEYTES 2.00 KBYTES PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

ARCHIVAL: 2.00 KBYTES 2.00 KBYTES

OF DISPLAYS: 5

FUNCTION NO: 4.3.5.1 NAME: MAINTENANCE AND REPAIR PROCEDURES

DATA SOURCES: RFP

METHODOLOGY: SUBSYSTEM, CREW TASK, AND OPERATIONAL ANALYSIS

RESPONSE TIME: I/O DELAY ALLOWABLE:

100.00 msec

COMMAND/CONTROL: LEVEL: I

LOCATION: 0

RATE: 800.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G

PHYSICAL LOCATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 2 INTERVAL: 2880.00 SEC

GROWTH REQUIREMENTS: IOC DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.20 KIPC 0.40 KIPC REPETITION RATE: 0.10/DA 1.00/DA PROCESSOR MEMORY: PROGRAM SIZE: 1.00 KEYTES 2.00 KBYTES DATA REQUIREMENT: 1.00 KBYTES 2.00 KBYTES DATA STORAGE: SECONDARY: 1000.00 KBYTES 2000.00 KEYTES PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

ARCHIVAL: 0.00 KBYTES 0.00 KBYTES

FUNCTION NO: 4.3.5.2 NAME: OPERATIONS PROCEDURES

DATA SOURCES: RFP, CRSS

METHODOLOGY: CREW TASK & INTERFACE ANALYSIS

RESPONSE TIME: I/O DELAY ALLOWABLE:

100.00 msec

COMMAND/CONTROL: LEVEL: I

LOCATION: 0

RATE: 400.00

DATA QUALITY: MAXIMUM BIT ERROR RATE:

1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G

PHYSICAL LOCATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 2 INTERVAL: 288.00 SEC

IOC GROWTH REQUIREMENTS: 0.40 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.20 KIPC . REPETITION RATE: 5.00/HR 5.00/HR PROCESSOR MEMORY: PROGRAM SIZE: 1.00 KBYTES 2.00 KEYTES 4.00 KBYTES DATA REQUIREMENT: 2.00 KBYTES DATA STORAGE: SECONDARY: 2000.00 KBYTES 4000.00 KBYTES

PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS
ARCHIVAL: 0.00 KBYTES 0.00 KBYTES

# OF DISPLAYS: 1000 1500

OF DISPLAYS: 1000 18

FUNCTION NO: 4.3.5.3 NAME: GENERAL DATA PROCESSING SUPPORT

DATA SOURCES:

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE:

2000.00 msec

COMMAND/CONTROL: LEVEL: I LOCATION: O RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

IOC REQUIREMENTS: GROWTH 5.00 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 5.00 KIPC REPETITION RATE: 5.00/DA 10.00/DA PROCESSOR MEMORY: PROGRAM SIZE: 128.00 KBYTES 128.00 KBYTES 128.00 KBYTES DATA REQUIREMENT: 128.00 KBYTES 10000.00 KEYTES DATA STORAGE: SECONDARY: 10000.00 KEYTES

PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS
ARCHIVAL: 0.00 KBYTES 0.00 KBYTES

OF DISPLAYS: 0 0

FUNCTION NO: 4.3.5.4 NAME: GENERAL PURPOSE PROGRAMMING LANGUAGE

DATA SOURCES:

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE:

2000.00 msec

COMMAND/CONTROL: LEVEL: I

LOCATION: O RATE:

0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I

PHYSICAL LOCATION CODE: T

DIAGNOSTICS/SELF TEST: REQUIRED: N

NUMBER: O INTERVAL:

0.00 SEC

GROWTH

50.00 KIPC

1.00/DA

REQUIREMENTS: DATA PROCESSING INSTRUCTIONS PER CYCLE: REPETITION RATE: PROCESSOR MEMORY: PROGRAM SIZE: DATA REQUIREMENT:

DATA STORAGE: SECONDARY: PERISHABILITY: ARCHIVAL: \* OF DISPLAYS: .

IOC 50.00 KIPC 1.00/DA 128.00 KBYTES 128.00 KBYTES 5000.00 KBYTES 5000.00 KBYTES

0.00 KEYTES

0

128.00 KBYTES 128.00 KBYTES 0.00% IN 0.00HRS 0.00% IN 0.00HRS 0.00 KEYTES

0

FUNCTION NO: 4.3.5.5 NAME: UPDATE SYSTEM SOFTWARE

DATA SOURCES:

**METHODOLOGY:** 

RESPONSE TIME: I/O DELAY ALLOWABLE:

2000.00 msec

COMMAND/CONTROL: LEVEL:

LOCATION:

RATE:

0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE:

0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE:

PHYSICAL LOCATION CODE:

DIAGNOSTICS/SELF TEST: REQUIRED:

NUMBER: O INTERVAL:

0.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 3.00 KIPC 6.00 KIPC REPETITION RATE: 1.00/MIN 1.00/MIN PROCESSOR MEMORY: PROGRAM SIZE: 10.00 KEYTES 10.00 KEYTES 20.00 KBYTES DATA REQUIREMENT: 20.00 KBYTES DATA STORAGE: SECONDARY: 50.00 KBYTES 100.00 KBYTES

PERISHABILITY: ARCHIVAL: \* OF DISPLAYS:

0.00 KEYTES

0.00% IN 0.00HRS 0.00% IN 0.00HRS 0.00 KBYTES

0

FUNCTION NO: 4.4.1.1 NAME: GROUND TRACK DETERMINATION

DATA SOURCES: SHUTTLE ONBOARD S/W SIZING AND LOADING DATA BASE.

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE: 100.00 msec

COMMAND/CONTROL: LEVEL: A.I LOCATION: O RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: S PHYSICAL LOCATION CODE: D

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOG GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.50 KIPC 1.00 KIPC REPETITION RATE: 1.00/S 1.00/S

PROCESSOR MEMORY: PROGRAM SIZE: 3.00 KBYTES 6.00 KBYTES DATA REQUIREMENT: 1.00 KEYTES 2.00 KBYTES

DATA STORAGE: SECONDARY: 4.00 KBYTES 8.00 KEYTES PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

ARCHIVAL: 0.00 KBYTES 0.00 KBYTES . OF DISPLAYS: 0 0

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.4.1.1PNAME: GROUND TRACK DETERMINATION

DATA SOURCES: SHUTTLE ONBOARD S/W SIZING AND LOADING DATA BASE.

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE: 100.00 msec

COMMAND/CONTROL: LEVEL: A,I LOCATION: 0 RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: S PHYSICAL LOCATION CODE: D

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: 0 INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.50 KIPC . 1.00 KIPC REPETITION RATE: 1.00/S 1.00/S

PROCESSOR MEMORY: PROGRAM SIZE: 3.00 KBYTES 6.00 KBYTES 1.00 KEYTES 2.00 KBYTES

DATA REQUIREMENT:
DATA STORAGE: SECONDARY:
PERISHABILITY:
ARCHIVAL: 4.00 KBYTES 8.00 KBYTES 0.00% IN 0.00HRS 0.00% IN 0.00HRS

0.00 KBYTES 0.00 KBYTES \* OF DISPLAYS: 0

FUNCTION NO: 4.4.1.2 NAME: MAGNETIC FIELD DETERMINATION

DATA SOURCES:

METHODOLOGY: ENGINEERING ESTIMATE

RESPONSE TIME: I/O DELAY ALLOWABLE: 1000.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: O RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: S PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH
DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.30 KIPC 0.30 KIPC
REPETITION RATE: 1.00/S 1.00/S

PROCESSOR MEMORT: PROGRAM SIZE: 1.50 KBYTES 1.50 KBYTES 1.50 KBYTES

DATA REQUIREMENT: 0.50 KBYTES 0.50 KBYTES
DATA STORAGE: SECONDARY: 2.00 KBYTES 2.00 KBYTES

PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS
ARCHIVAL: 0.00 KBYTES 0.00 KBYTES

OF DISPLAYS: 0 0

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.4.1.2PNAME: MAGNETIC FIELD DETERMINATION

DATA SOURCES:

METHODOLOGY: ENGINEERING ESTIMATE

RESPONSE TIME: I/O DELAY ALLOWABLE: 1000.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: O RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: S PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: 0 INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH
DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.30 KIPC 0.30 KIPC

REPETITION RATE: 1.00/S 1.00/S
PROCESSOR MEMORY: PROGRAM SIZE: 1.50 KBYTES 1.50 KBYTES
DATA REQUIREMENT: 0.50 KBYTES 0.50 KBYTES

DATA REQUIREMENT: 0.50 KBYTES 0.50 KBYTES
DATA STORAGE: SECONDARY: 2.00 KBYTES 2.00 KBYTES

PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS
ARCHIVAL: 0.00 KEYTES 0.00 KEYTES

# OF DISPLAYS: 0 0

FUNCTION NO: 4.4.1.3 NAME: PALLET COARSE POINTING

DATA SOURCES: SHUTTLE ONBOARD S/W SIZING AND LOADING DATA BASE.

METHODOLOGY: USED SHUTTLE SM ANTENNA MGMT. AND GNC UNIVERSAL POINTING

PRINCIPAL FUNCTION 4.213

RESPONSE TIME: I/O DELAY ALLOWABLE: 100.00 Rsec

COMMAND/CONTROL: LEVEL: A, I LOCATION: O,G RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: S PHYSICAL LOCATION CODE: X

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 1 INTERVAL: 3600.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 1.00 KIPC 2.00 KIPC REPETITION RATE: 10.00/S 10.00/S PROCESSOR MEMORY: PROGRAM SIZE: 10.00 KBYTES 20.00 KBYTES DATA REQUIREMENT: 2.00 KBYTES 4.00 KBYTES DATA STORAGE: SECONDARY: 12.00 KEYTES **24.00 KBYTES** PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

ARCHIVAL: 0.00 KBYTES 0.00 KEYTES + OF DISPLAYS: 0 0

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.4.1.3PNAME: PALLET COARSE POINTING

DATA SOURCES: SHUTTLE ONBOARD S/W SIZING AND LOADING DATA BASE.

METHODOLOGY: USED SHUTTLE SM ANTENNA MGMT. AND GNC UNIVERSAL POINTING

PRINCIPAL FUNCTION 4.213

RESPONSE TIME: I/O DELAY ALLOWABLE: 100.00 msec

COMMAND/CONTROL: LEVEL: A.I LOCATION: O.G RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: S PHYSICAL LOCATION CODE: X

DIAGNOSTICS/SELF TEST: REQUIRED: I NUMBER: 1 INTERVAL: 3€00.00 SEC

IOC 1.00 KIPC REQUIREMENTS: GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 2.00 KIPC REPETITION RATE: 10.00/S 10.00/S

PROCESSOR MEMORY: PROGRAM SIZE: 10.00 KBYTES 20.00 KBYTES 2.00 KBYTES DATA REQUIREMENT: 4.00 KBYTES

DATA REQUIREMENTS
DATA STORAGE: SECONDARY:
PERISHABILITY: 12.00 KBYTES 24.00 KBYTES 0.00% IN 0.00HRS 0.00% IN 0.00HRS

0.00 KBYTES 0.00 KBYTES ARCHIVAL: \* OF DISPLAYS: 0 Ω

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FUNCTION NO: 4.4.1.4 NAME: RELATIVE ALIGNMENT DETERMINATION

DATA SOURCES: SHUTTLE ONBOARD SOFTWARE SIZING AND LOADING DATA BASE

METHODOLOGY: SHUTTLE ATTITUDE PROCESSING AND SKYLAB GROUND PROCESSING OF

ALIGNMENT DATA.

RESPONSE TIME: I/O DELAY ALLOWABLE:

100.00 msec

RATE:

COMMAND/CONTROL: LEVEL: A.I

LOCATION: O

0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE:

1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: S

PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 4 INTERVAL: 3600.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 2.00 KIPC 2.00 KIPC REPETITION RATE: 0.10/S 0.10/S PROCESSOR MEMORY: PROGRAM SIZE: 13.00 KEYTES

13.00 KBYTES DATA REQUIREMENT: 9.00 KBYTES 9.00 KBYTES DATA STORAGE: SECONDARY: 22.00 KBYTES **22.00 KBYTES** PERISHABILITY:

0.00% IN 0.00HRS 0.00% IN 0.00HRS ARCHIVAL: O.OO KBYTES O.OO KEYTES \* OF DISPLAYS: 1 1

20-JUL-1985

SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.4.1.4PNAME: RELATIVE ALIGNMENT DETERMINATION

DATA SOURCES: SHUTTLE ONBOARD SOFTWARE SIZING AND LOADING DATA BASE

METHODOLOGY: SHUTTLE ATTITUDE PROCESSING AND SKYLAB GROUND PROCESSING OF

ALIGNMENT DATA.

RESPONSE TIME: I/O DELAY ALLOWABLE:

100.00 msec

COMMAND/CONTROL: LEVEL: A.I

LOCATION: O RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: S PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 4 INTERVAL: 3600.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 1.00 KIPC 1.50 KIPC REPETITION RATE: 0.10/8 0.10/S

PROCESSOR MEMORY: PROGRAM SIZE: 7.00 KBYTES 10.00 KBYTES 4.00 KBYTES DATA REQUIREMENT: 6.00 KBYTES DATA STORAGE: SECONDARY: 5.00 KBYTES 7.00 KBYTES

PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS ARCHIVAL: O.OO KEYTES 0.00 KBYTES

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SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.4.2 NAME: ENVIRONMENT MONITOR

DATA SOURCES: SHUTTLE ONBOARD S/W SIZING AND LOADING DATA BASE.

METHODOLOGY: BASED ON SHUTTLE SYSTEM MONITOR DATA ACQUISITIONED AND PARAMETER

MONITORING AND REPORTING.

RESPONSE TIME: I/O DELAY ALLOWABLE:

2000.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: O RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: S

PHYSICAL LOCATION CODE: D

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH 4.00 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 8.00 KIPC 0.10/5 REPETITION RATE: 0.10/S

PROCESSOR MEMORY: PROGRAM SIZE: 12.00 KEYTES 24.00 KBYTES DATA REQUIREMENT: 8.00 KEYTES 16.00 KBYTES

DATA STORAGE: SECONDARY: 20.00 KBYTES 40.00 KBYTES 0.00% IN 0.00HRS 0.00% IN 0.00HRS PERISHABILITY: ARCHIVAL: O.OO KEYTES 0.00 KBYTES

# OF DISPLAYS: 0 0

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.4.2P NAME: ENVIRONMENT MONITOR

DATA SOURCES: SHUTTLE ONBOARD S/W SIZING AND LOADING DATA BASE.

METHODOLOGY: BASED ON SHUTTLE SYSTEM MONITOR DATA ACQUISITIONED AND PARAMETER

MONITORING AND REPORTING.

RESPONSE TIME: I/O DELAY ALLOWABLE: 2000.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: O RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: S PHYSICAL LOCATION CODE: D

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

IOC REQUIREMENTS: GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 4.00 KIPC 8.00 KIPC REPETITION RATE: 0.10/5 0.10/S

PROCESSOR MEMORY: PROGRAM SIZE: 12.00 KBYTES 24.00 KBYTES DATA REQUIREMENT: 8.00 KBYTES 16.00 KBYTES

DATA STORAGE: SECONDARY: 20.00 KBYTES 40.00 KBYTES 0.00% IN 0.00HRS 0.00% IN PERISHABILITY: 0.00HRS

ARCHIVAL: · 0.00 KBYTES 0.00 KBYTES

FUNCTION NO: 4.4.3 NAME: TRACKING SERVICES

DATA SOURCES: SHUTTLE ONBOARD S/W SIZING AND LOADING.

METHODOLOGY: EXAMINED SIMILAR CODE/DATA.

RESPONSE TIME: I/O DELAY ALLOWABLE:

100.00 msec

COMMAND/CONTROL: LEVEL: A.I

LOCATION: O RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: S

PHYSICAL LOCATION CODE: H

NUMBER: DIAGNOSTICS/SELF TEST: REQUIRED: N O INTERVAL: 0.00 SEC

IOC REQUIREMENTS: DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.20 KIPC REPETITION RATE: 0.50/S PROCESSOR MEMORY: PROGRAM SIZE: 5.00 KBYTES DATA REQUIREMENT:

DATA STORAGE: SECONDARY: PERISHABILITY: ARCHIVAL:

1.00 KBYTES 4.00 KBYTES 0.00% IN 0.00HRS 0.00% IN 0.00HRS 0.00 KBYTES

12.00 KBYTES 0.00 KBYTES

GROWTH

0.50/S

0.60 KIPC

9.00 KBYTES

3.00 KBYTES

FUNCTION NO: 4.5.1 NAME: MONITOR CORE SYSTEM'S STATUS

DATA SOURCES: SHUTTLE ONBOARD S/W SIZING AND LOADING DATA BASE.

METHODOLOGY: COMBINATION OF SHUTTLE GUARDS, SYSTEMS MONITORING PROGRAMS, AND

DATA AND ESTIMATES FOR ADDITION S.S. NEEDS.

RESPONSE TIME: I/O DELAY ALLOWABLE:

1000.00 msec

COMMAND/CONTROL: LEVEL: A

LOCATION: O

0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE:

1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: S

PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

> , IOC REQUIREMENTS:

GROWTH

RATE:

DATA PROCESSING INSTRUCTIONS PER CYCLE: REPETITION RATE:

1.00 KIPC 2.00 KIPG 0.50/S 0.50/S

PROCESSOR MEMORY: PROGRAM SIZE:

4.00 KBYTES 8.00 KEYTES 2.00 KEYTES 4.00 KBYTES

DATA REQUIREMENT: DATA STORAGE: SECONDARY:

6.00 KEYTES 12.00 KBYTES

PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

ARCHIVAL:

0.00 KBYTES

0.00 KBYTES

\* OF DISPLAYS: 0 ٥

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SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.5.1P NAME: MONITOR CORE SYSTEM'S STATUS

DATA SOURCES: SHUTTLE ONBOARD S/W SIZING AND LOADING DATA BASE.

METHODOLOGY: COMBINATION OF SHUTTLE GUARDS, SYSTEMS MONITORING PROGRAMS, AND

DATA AND ESTIMATES FOR ADDITION PLATFORM NEEDS.

RESPONSE TIME: I/O DELAY ALLOWABLE:

1000.00 msec

RATE:

COMMAND/CONTROL: LEVEL: A

LOCATION: O

0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE:

1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: S

PHYSICAL LOCATION CODE: H

NUMBER: O INTERVAL: DIAGNOSTICS/SELF TEST: REQUIRED: N 0.00 SEC

REQUIREMENTS: DATA PROCESSING INSTRUCTIONS PER CYCLE:

IOC 0.60 KIPC

GROWTH 1.20 KIPC

REPETITION RATE: PROCESSOR MEMORY: PROGRAM SIZE:

0.50/S 2.40 KBYTES 1.20 KBYTES 0.50/S 4.80 KBYTES

DATA REQUIREMENT: DATA STORAGE: SECONDARY: PERISHABILITY:

3.60 KBYTES 0.00% IN 0.00HRS 0.00% IN 0.00HRS

2.40 KBYTES 7.20 KBYTES

ARCHIVAL:

O.OO KEYTES

0.00 KBYTES

FUNCTION NO: 4.5.2 NAME: MONITOR CUSTOMER SYSTEMS STATUS

DATA SOURCES: SHUTTLE ONBOARD S/W SIZING AND LOADING DATA BASE.

METHODOLOGY: ESTIMATED LIKE SYSTEMS MONITORING PLUS MUCH MORE AUTOMATION.

RESPONSE TIME: I/O DELAY ALLOWABLE: 1000.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: O RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: S PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH

DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.80 KIPC 1.60 KIPC
REPETITION RATE: 0.50/S 0.50/S

PROCESSOR MEMORY: PROGRAM SIZE: 4.00 KBYTES 8.00 KBYTES
DATA REQUIREMENT: 2.00 KBYTES 4.00 KBYTES

DATA REQUIREMENT: 2.00 KEYTES 4.00 KEYTES

DATA STORAGE: SECONDARY: 6.00 KEYTES 12.00 KEYTES

PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HR

PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS
ARCHIVAL: 0.00 KBYTES 0.00 KBYTES

OF DISPLAYS: 0 2

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.5.2P NAME: MONITOR CUSTOMER SYSTEMS STATUS

DATA SOURCES: SHUTTLE ONBOARD S/W SIZING AND LOADING DATA BASE.

METHODOLOGY: ESTIMATED LIKE SYSTEMS MONITORING PLUS MUCH MORE AUTOMATION.

RESPONSE TIME: I/O DELAY ALLOWABLE: 1000.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: O RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: S PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: 0 INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH
DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.50 KIPC 1.00 KIPC

REPETITION RATE: 0.50/S 0.50/S
PROCESSOR MEMORY: PROGRAM SIZE: 2.40 KBYTES 4.80 KBYTES
DATA REQUIREMENT: 1.20 KBYTES 2.40 KBYTES

DATA REQUIREMENT: 1.20 KBYTES 2.40 KBYTES

DATA STORAGE: SECONDARY: 5.60 KBYTES 7.20 KBYTES

PERISHABILITY: 0.00% IN 0.00HBS 0.00% IN 0.00HBS

PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS
ARCHIVAL: 0.00 KBYTES 0.00 KBYTES

0

NAME: MASS PROPERTIES CONFIGURATION UPDATE FUNCTION NO: 4.5.3

DATA SOURCES: SHUTTLE ABOARD SIZING AND LOADING DATA BASE.

METHODOLOGY: MASS HANDLING ROUTINES IN SHUTTLE & ENGINEERING ESTIMATE

FOR DOCKING AND UN-DOCKING NEEDS OF SPACE STATION.

RESPONSE TIME: I/O DELAY ALLOWABLE:

1000.00 msec

COMMAND/CONTROL: LEVEL: A

LOCATION: O

RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: S

PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED:

NUMBER: O INTERVAL:

0.00 SEC

REQUIREMENTS: DATA PROCESSING INSTRUCTIONS PER CYCLE:

IOC 1.00 KIPC 0.10/S

GROWTH 2.00 KIPC

0.10/S

REPETITION RATE: PROCESSOR MEMORY: PROGRAM SIZE:

7.00 KEYTES

14.00 KBYTES 3.00 KBYTES

DATA REQUIREMENT: DATA STORAGE: SECONDARY: PERISHABILITY:

5.00 KEYTES 10.00 KEYTES

20.00 KEYTES 0.00% IN 0.00HRS 0.00% IN 0.00HRS

0

ARCHIVAL: \* OF DISPLAYS:

0.00 KBYTES 0

0.00 KEYTES

20-JUL-1985

SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.5.3P NAME: MASS PROPERTIES CONFIGURATION UPDATE

DATA SOURCES: SHUTTLE ABOARD SIZING AND LOADING DATA BASE.

METHODOLOGY: MASS HANDLING ROUTINES IN SHUTTLE & ENGINEERING ESTIMATE

FOR DOCKING AND UN-DOCKING NEEDS OF SPACE STATION.

RESPONSE TIME: I/O DELAY ALLOWABLE:

1000.00 msec

COMMAND/CONTROL: LEVEL: A

LOCATION: O

RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: S

PHYSICAL LOCATION CODE: H

IOC

DIAGNOSTICS/SELF TEST: REQUIRED:

NUMBER: O INTERVAL:

0.00 SEC

REQUIREMENTS: DATA PROCESSING INSTRUCTIONS PER CYCLE:

0.10 KIPC 0.10/S

GROWTH 0.20 KIPC 0.10/S

REPETITION RATE: PROCESSOR MEMORY: PROGRAM SIZE: DATA REQUIREMENT: DATA STORAGE: SECONDARY:

0.70 KBYTES 0.30 KBYTES 1.00 KBYTES

1.40 KBYTES 0.60 KBYTES 2.00 KBYTES

PERISHABILITY: ARCHIVAL:

0.00% IN 0.00HRS 0.00% IN 0.00HRS 0.00 KBYTES

O.OO KBYTES

\* OF DISPLAYS:

0

O

FUNCTION NO: 4.5.4.1 NAME: FAULT ANALYSIS

DATA SOURCES: SHUTTLE ONBOARD S/W SIZING AND LOADING DATA BASE.

METHODOLOGY: SHUTTLE VERY LIMITED--CODE/DATA MODELS ONLY; SOME SYSTEMS

SERVICE S/W AND SOME SYSTEMS MANAGEMENT.

RESPONSE TIME: I/O DELAY ALLOWABLE: 1000.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: O RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: S PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH
DATA PROCESSING INSTRUCTIONS PER CYCLE: 4.00 KIPC 40.00 KIPC
REPETITION RATE: 0.50/S 0.50/S

PROCESSOR MEMORY: PROGRAM SIZE: 20.00 KBYTES 200.00 KBYTES 40.00 KBYTES

DATA REQUIREMENT: 20.00 KBYTES 40.00 KBYTES
DATA STORAGE: SECONDARY: 40.00 KBYTES 240.00 KBYTES
PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

ARCHIVAL: 0.00 KEYTES 0.00 KEYTES

• OF DISPLAYS: 0 0

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.5.4.1PNAME: FAULT ANALYSIS

DATA SOURCES: SHUTTLE ONBOARD S/W SIZING AND LOADING DATA BASE.

METHODOLOGY: SHUTTLE VERY LIMITED--CODE/DATA MODELS ONLY; SOME SYSTEMS

SERVICE S/W AND SOME SYSTEMS MANAGEMENT.

RESPONSE TIME: I/O DELAY ALLOWABLE: 1000.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: O RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: S PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: 0 INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 2.80 KIPC 28.00 KIPC

REPETITION RATE: 0.50/S 0.50/S
PROCESSOR MEMORY: PROGRAM SIZE: 14.00 KBYTES
DATA REQUIREMENT: 14.00 KBYTES 140.00 KBYTES

DATA REQUIREMENT: 14.00 KBYTES 140.00 KBYTES
DATA STORAGE: SECONDARY: 28.00 KBYTES 280.00 KBYTES
DATA STORAGE: SECONDARY: 0.004 JW 0.004 J

PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS
ARCHIVAL: 0.00 KEYTES 0.00 KEYTES

OF DISPLAYS: 0 0

FUNCTION NO: 4.5.4.2 NAME: FAULT CORRECTION

DATA SOURCES: SHUTTLE ONBOARD S/W SIZING AND LOADING DATA BASE.

METHODOLOGY: SOME EXAMPLES IN SYSTEM SERVICES: I/O CHAIN BYPASS

RESPONSE TIME: I/O DELAY ALLOWABLE: 1000.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: S PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

IOC REQUIREMENTS: GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 4.00 KIPC 40.00 KIPC REPETITION RATE: 0.50/S 0.50/S

PROCESSOR MEMORY: PROGRAM SIZE: 20.00 KETTES 200.00 KBYTES DATA REQUIREMENT: 20.00 KBYTES 40.00 KBYTES

DATA STORAGE: SECONDARY: 40.00 KBYTES 240.00 KBYTES PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS ARCHIVAL: 0.00 KBYTES 0.00 KBYTES

\* OF DISPLAYS: 0 0

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.5.4.2PNAME: FAULT CORRECTION

DATA SOURCES: SHUTTLE ONBOARD S/W SIZING AND LOADING DATA BASE.

METHODOLOGY: SOME EXAMPLES IN SYSTEM SERVICES: I/O CHAIN BYPASS

RESPONSE TIME: I/O DELAY ALLOWABLE: 1000.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: S PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH 2.80 KIPC . DATA PROCESSING INSTRUCTIONS PER CYCLE: 5.00 KIPC

REPETITION RATE: 0.50/S 0.50/S PROCESSOR MEMORY: PROGRAM SIZE: 14.00 KBYTES 140.00 KBYTES

DATA REQUIREMENT: 14.00 KEYTES 28.00 KEYTES 28.00 KBYTES 150.00 KBYTES

DATA STORAGE: SECONDARY:
PERISHABILITY:
ARCHIVAL: 0.00% IN 0.00HRS 0.00% IN 0.00HRS O.OO KBYTES 0.00 KBYTES

20-JUL-1985

SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.5.4.3 NAME: TREND ANALYSIS

DATA SOURCES: SHUTTLE ONBOARD S/W SIZING AND LOADING DATA BASE

METHODOLOGY: ROUTINES FOR DISPLAYS; ENTRY, ASCENT

RESPONSE TIME: I/O DELAY ALLOWABLE:

1000.00 msec

COMMAND/CONTROL: LEVEL: A

LOCATION: O

RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: S

PHYSICAL LOCATION CODE: H

IOC

DIAGNOSTICS/SELF TEST: REQUIRED: N

NUMBER: O INTERVAL:

0.00 SEC

REQUIREMENTS: DATA PROCESSING INSTRUCTIONS PER CYCLE: REPETITION RATE:

O.50 KIPC 1.00/S

GROWTH 0.70 KIPC

PROCESSOR MEMORY: PROGRAM SIZE:

5.00 KBYTES 2.00 KEYTES 7.00 KEYTES

7.00 KBYTES 4.00 KBYTES

DATA REQUIREMENT: DATA STORAGE: SECONDARY: PERISHABILITY:

0.00% IN 0.00HRS 0.00% IN 0.00HRS

9.00 KBYTES

1.00/\$

ARCHIVAL: + OF DISPLAYS:

0.00 KEYTES 0

0.00 KBYTES

0

20-JUL-1985

SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.5.4.3PNAME: TREND ANALYSIS

DATA SOURCES: SHUTTLE ONBOARD S/W SIZING AND LOADING DATA BASE

METHODOLOGY: ROUTINES FOR DISPLAYS; ENTRY, ASCENT

RESPONSE TIME: I/O DELAY ALLOWARLE:

1000.00 msec

RATE:

COMMAND/CONTROL: LEVEL: A

LOCATION: 0

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: S PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL:

0.00 SEC

0.00

REQUIREMENTS: DATA PROCESSING INSTRUCTIONS PER CYCLE:

IOC 0.35 KIPC

GROWTH 0.50 KIPC

REPETITION RATE: PROCESSOR MEMORY: PROGRAM SIZE:

1.00/S 3.50 KBYTES 1.40 KBYTES

1.00/5 5.00 KBYTES

DATA REQUIREMENT: DATA STORAGE: SECONDARY: PERISHABILITY: ARCHIVAL:

5.00 KBYTES 0.00% IN 0.00HRS 0.00% IN 0.00HRS 0.00 KBYTES

2.80 KBYTES 10.00 KBYTES

\* OF DISPLAYS:

. 0

0.00 KBYTES 0

FUNCTION NO: 4.5.5 NAME: SYSTEM TEST AND EVALUATION

DATA SOURCES: SHUTTLE ONBOARD S/W SIZING AND LOADING DATA BASE.

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE: 1000.00 msec

LOCATION: 0 RATE: 0.00 COMMAND/CONTROL: LEVEL: A

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: S PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 2.00 KIPC 4.00 KIPC 0.50/S REPETITION RATE: 0.50/S

PROCESSOR MEMORY: PROGRAM SIZE: 20.00 KEYTES 20.00 KBYTES 15.00 KBYTES

15.00 KBYTES 35.00 KBYTES DATA REQUIREMENT:
DATA STORAGE: SECONDARY: 35.00 KBYTES PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

ARCHIVAL: 0.00 KBYTES 0.00 KBYTES

\* OF DISPLAYS: 0 0

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.5.5P NAME: SYSTEM TEST AND EVALUATION

DATA SOURCES: SHUTTLE ONBOARD S/W SIZING AND LOADING DATA BASE.

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE: 1000.00 msec

· COMMAND/CONTROL: LEVEL: A LOCATION: 0 RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

PHYSICAL LOCATION CODE: H SYSTEM DEPENDENCY CODE: S

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 1.40 KIPC 2.80 KIPC REPETITION RATE: 0.50/S 0.50/S

PROCESSOR MEMORY: PROGRAM SIZE:
DATA REQUIREMENT:
DATA STORAGE: SECONDARY:
PERISHABILITY:
ARCHIVAL: 14.00 KBYTES 28.00 KBYTES 10.00 KBYTES 15.00 KBYTES 20.00 KBYTES

35.00 KBYTES 0.00% IN 0.00HRS 0.00% IN 0.00HRS 0.00 KBYTES 0.00 KBYTES

FUNCTION NO: 4.5.6 NAME: COMMAND INTERFACE PROCESSING

DATA SOURCES: SHUTTLE ONBOARD S/W SIZING AND LOADING DATA BASE.

METHODOLOGY: SHUTTLE SOP'S FOR GNC, SM, NU, ETC.

RESPONSE TIME: I/O DELAY ALLOWABLE: 1000.00 msec

LOCATION: S RATE: 0.00 COMMAND/CONTROL: LEVEL: I

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: S PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

IOC REQUIREMENTS: GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 6.00 KIPC 0.50/S 18.00 KIPC REPETITION RATE: 0.50/S

PROCESSOR MEMORY: PROGRAM SIZE: 52.00 KBYTES 154.00 KBYTES 17.00 KEYTES 59.00 KEYTES 69.00 KEYTES 193.00 KEYTES DATA REQUIREMENT: 59.00 KBYTES

DATA STORAGE: SECONDARY: PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS ARCHIVAL: 0.00 KEYTES 0.00 KEYTES

\* OF DISPLAYS: 23 65

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 4.5.6P NAME: COMMAND INTERFACE PROCESSING

DATA SOURCES: SHUTTLE ONBOARD S/W SIZING AND LOADING DATA BASE.

METHODOLOGY: SHUTTLE SOP'S FOR GNC, SM, NU, ETC.

RESPONSE TIME: I/O DELAY ALLOWABLE: 1000.00 msec

COMMAND/CONTROL: LEVEL: I LOCATION: S **RATE:** 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: S PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: 0 INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 2.40 KIPC 7.20 KIPC

REPETITION RATE: 0.50/S 0.50/S PROCESSOR MEMORY: PROGRAM SIZE: 20.00 KEYTES 60.00 KBYTES DATA REQUIREMENT: 8.00 KBYTES **24.00 KBYTES** 

DATA STORAGE: SECONDARY: PERISHABILITY: 28.00 KBYTES 84.00 KBYTES 0.00% IN 0.00HRS 0.00% IN 0.00HRS ARCHIVAL: 0.00 KBYTES

0.00 KBYTES \* OF DISPLAYS: 0 0

FUNCTION NO: 5.1.1.1 NAME: UPDATE/ACCESS AND SYNCHRONIZATION

DATA SOURCES: SIZE BASED ON DBASE III(TM) FOR IBM PG. SPEED IS ENGR EST

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE: 100.00 msec

LOCATION: O,G RATE: COMMAND/CONTROL: LEVEL: A.I 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 1 INTERVAL: 0.00 SEC

REQUIREMENTS: . IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 100.00 KIPC 200.00 KIPC INSTRUCTIONS FER USED.

REPETITION RATE:

10.00/HR

1: PROGRAM SIZE:

250.00 KBYTES

500.00 KBYTES

100.00 KBYTES

100.00 KBYTES

20000.00 KBYTES

20000.00 KBYTES

20000.00 KBYTES

0.00% IN 12.00HRS

0.00 KBYTES

0.00 KBYTES PROCESSOR MEMORY: PROGRAM SIZE: DATA REQUIREMENT: DATA STORAGE: SECONDARY:

ARCHIVAL: 
• OF DISPLAYS:

1 2

SSDS FUNCTIONAL DATA SHEET 20-JUL-1985

FUNCTION NO: 5.1.1.1PNAME: UPDATE/ACCESS AND SYNCHRONIZATION

DATA SOURCES: SIZE BASED ON DBASE III(TM) FOR IBM PC. SPEED IS ENGR EST

METHODOLOGY:

100.00 msec RESPONSE TIME: I/O DELAY ALLOWABLE:

COMMAND/CONTROL: LEVEL: A.I LOCATION: O,G RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 1 INTERVAL: 0.00 SEC

IOC REQUIREMENTS: GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 100.00 KIPC : 200.00 KIPC

| COMMITTEE | COMM PROCESSOR MEMORY: PROGRAM SIZE:

0.00% IN 12.00HRS 0.00% IN 12.00HRS

FUNCTION NO: 5.1.1.2 NAME: DATA FILE MANAGEMENT

DATA SOURCES: SPACE SHUTTLE MASS MEMORY UTILITY

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE: 60000.00 msec

LOCATION: O,G RATE: COMMAND/CONTROL: LEVEL: A 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH

DATA PROCESSING INSTRUCTIONS PER CYCLE: 2.00 KIPC 5.00 KIPC
REPETITION RATE: 10.00/HR 10.00/HR

PROCESSOR MEMORY: PROGRAM SIZE: 12.00 KBYTES 20.00 KBYTES
DATA REQUIREMENT: 140.00 KBYTES 200.00 KBYTES
DATA STORAGE: SECONDARY: 0.00 KBYTES 0.00 KBYTES
PERISHABILITY: 0.00 IN 24.00HRS 0.00% IN 24.00HRS

APCHIVAL: 0.00 FEWEES

PERISHABILITY: ARCHIVAL: 0.00 KEYTES 0.00 KBYTES

\* OF DISPLAYS: 1 1

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 5.1.1.2PNAME: DATA FILE MANAGEMENT

DATA SOURCES: SPACE SHUTTLE MASS MEMORY UTILITY

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE: 60000.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: O.G RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

IOC REQUIREMENTS: GROWTH 2.00 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 5.00 KIPC 10.00/HR 12.00 KBYTES REPETITION RATE:
PROCESSOR MEMORY: PROGRAM SIZE: 10.00/HR 20.00 KBYTES RY: PROGRAM 5122. DATA REQUIREMENT:

140.00 KBYTES 0.00 KBYTES 200.00 KBYTES DATA STORAGE: SECONDARY: 0.00 KBYTES

GE: SECONDARY: 0.00% IN 24.00HRS 0.00% IN 24.00HRS ARCHIVAL:

0.00 KBYTES 0.00 KBYTES \* OF DISPLAYS:

FUNCTION NO: 5.1.1.3 NAME: MASS MEMORY RESOURCE MANAGEMENT

DATA SOURCES: ENGINEERING ESTIMATE

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE:

30000.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: O.G RATE: O.OO

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I

PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH
DATA PROCESSING INSTRUCTIONS PER CYCLE: 10.00 KIPC 20.00 KIPC
REPETITION RATE: 1.00/HR 1.00/HR
PROCESSOR MEMORY: PROGRAM SIZE: 10.00 KEYTES 20.00 KEYTE

PROCESSOR MEMORY: PROGRAM SIZE: 10.00 KBYTES 20.00 KBYTES

DATA REQUIREMENT: 4.00 KBYTES 10.00 KBYTES

DATA STORAGE: SECONDARY: 0.00 KEYTES 0.00 KEYTES
PERISHABILITY: 0.00% IN 24.00HRS 0.00% IN 24.00HRS

ARCHIVAL: 0.00 KBYTES 0.00 KBYTES

• OF DISPLAYS: 1 1

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 5.1.1.3PNAME: MASS MEMORY RESOURCE MANAGEMENT

DATA SOURCES: ENGINEERING ESTIMATE

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE: 30000.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: 0,G RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: 0 INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH

DATA PROCESSING INSTRUCTIONS PER CYCLE: 10.00 KIPC 20.00 KIPC REPETITION RATE: 1.00/HR 1.00/HR PROCESSOR MEMORY: PROGRAM SIZE: 10.00 KBYTES 20.00 KBYTE

PROCESSOR MEMORY: PROGRAM SIZE: 10.00 KBYTES 20.00 KBYTES

DATA REQUIREMENT: 4.00 KBYTES 10.00 KBYTES

DATA STORAGE: SECONDARY: 0.00 KBYTES 0.00 KBYTES

DATA STORAGE: SECONDARY:

PERISHABILITY:

ARCHIVAL:

0.00 KBYTES

0.00 KBYTES

0.00 KBYTES

0.00 KBYTES

0.00 KBYTES

OF DISPLAYS:

0.00 REITES
0.00 REITES

FUNCTION NO: 5.1.1.4 NAME: ARCHIVAL STORAGE

DATA SOURCES: ENGINEERING ESTIMATE

METHODOLOGY: ASSUME DUMP TO ARCHIVE OF CORESTAT OF PAST 24 HRS. DONE ONCE

PER DAY. ASSUME 100BYTES/SEC OF PERTINENT DATA ENTERED IN CORESTA

RESPONSE TIME: I/O DELAY ALLOWABLE:

60000.00 msec

COMMAND/CONTROL: LEVEL: A.I

LOCATION: O,G RATE:

0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE:

0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I

PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 10.00 KIPG 20.00 KIPC

REPETITION RATE: 1.00/DA 1.00/DA PROCESSOR MEMORY: PROGRAM SIZE: 20.00 KEYTES 40.00 KBYTES

DATA REQUIREMENT: 5.00 KBYTES 10.00 KBYTES DATA STORAGE: SECONDARY: 0.00 KBYTES 0.00 KBYTES

PERISHABILITY: 0.00% IN 24.00HRS 0.00% IN 24.00HRS ARCHIVAL: 47000000.00 KEYTES 78000000.00 KBYTES

FUNCTION NO: 5.1.1.5 NAME: DEVICE MANAGEMENT

DATA SOURCES: ENGINEERING ESTIMATE

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE: 10000.00 msec

COMMAND/CONTROL: LEVEL: A,I LOCATION: O,G RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH
DATA PROCESSING INSTRUCTIONS PER CYCLE: 1.00 KIPC 1.50 KIPC
REPETITION RATE: 1.00/S 1.00/S

PROCESSOR MEMORY: PROGRAM SIZE: 1.00 KBYTES 2.00 KBYTES
DATA REQUIREMENT: 0.50 KBYTES 1.00 KBYTES

DATA STORAGE: SECONDARY: 0.00 KEYTES 0.00 KEYTES
PERISHABILITY: 0.00% IN 24.00HRS 0.00% IN 24.00HRS

ARCHIVAL: 0.00 KBYTES 0.00 KBYTES

• OF DISPLAYS: 1

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 5.1.1.5PNAME: DEVICE MANAGEMENT

DATA SOURCES: ENGINEERING ESTIMATE

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE: 10000.00 msec

COMMAND/CONTROL: LEVEL: A,I LOCATION: O,G RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: 0 INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH
DATA PROCESSING INSTRUCTIONS PER CYCLE: 1.00 KIPC 1.50 KIPC
REPETITION RATE: 1.00/S 1.00/S

PROCESSOR MEMORY: PROGRAM SIZE: 0.70 KBYTES 1.50 KBYTES
DATA REQUIREMENT: 0.40 KBYTES 0.70 KBYTES

DATA STORAGE: SECONDARY: 0.00 KBYTES 0.00 KBYTES

PERISHABILITY: 0.00% IN 24.00HRS 0.00% IN 24.00HRS
ARCHIVAL: 0.00 KBYTES 0.00 KBYTES

OF DISPLAYS:

U.UU KBYTES

0.00 K

FUNCTION NO: 5.1.1.6 NAME: COMMAND INTERFACE PROCESSING

DATA SOURCES: ENGINEERING ESTIMATE

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE: 10000.00 msec

LOCATION: O,G RATE: 0.00 COMMAND/CONTROL: LEVEL: I

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

IOC 0.10 KIPC 1.00/S REQUIREMENTS: GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.20 KIPC REPETITION RATE: 1.00/S

1.00 KBYTES PROCESSOR MEMORY: PROGRAM SIZE: 2.00 KEYTES 1.00 KBYTES 0.50 KBYTES 0.00 KBYTES DATA REQUIREMENT: 1.00 KBYTES

DATA STORAGE: SECONDARY: 0.00 KBYTES 0.00 KBYTES PERISHABILITY:

0.00% IN 24.00HRS 0.00% IN 24.00HRS 0.00 KBYTES 0.00 KBYTES ARCHIVAL:

+ OF DISPLAYS: 0 0

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 5.1.1.6PNAME: COMMAND INTERFACE PROCESSING

DATA SOURCES: ENGINEERING ESTIMATE

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE: 10000.00 msec

COMMAND/CONTROL: LEVEL: I LOCATION: O.G RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: H

NUMBER: O INTERVAL: DIAGNOSTICS/SELF TEST: REQUIRED: N 0.00 SEC

REQUIREMENTS: IOC GROWTH O.10 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.20 KIPC 1.00/S REPETITION RATE: 1.00/S

PROCESSOR MEMORY: PROGRAM SIZE: 0.70 KBYTES 1.50 KBYTES 0.40 KBYTES 0.00 KBYTES DATA REQUIREMENT: 0.70 KBYTES DATA STORAGE: SECONDARY: 0.00 KBYTES

PERISHABILITY: ARCHIVAL: 0.00% IN 24.00HRS 0.00% IN 24.00HRS O.OO KEYTES 0.00 KBYTES

FUNCTION NO: 5.1.2.1 NAME: LOAD SCHEDULING

DATA SOURCES:

METHODOLOGY: ENGINEERING ESTIMATE

RESPONSE TIME: I/O DELAY ALLOWABLE:

120000.00 msec

LOCATION: G,O RATE: 0.00 COMMAND/CONTROL: LEVEL: I

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: 0 INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 10.00 KIPC 10.00 KIPC REPETITION RATE: 1.00/DA PROCESSOR MEMORY: PROGRAM SIZE:

1.00/DA 5.00 KBYTES 5.00 KBYTES 50.00 KBYTES 10.00 KBYTES DATA REQUIREMENT: 10.00 KBYTES

5.00 KBYTES 10.00 KBYTES 50.00 KBYTES 50.00 KBYTES 1.00% IN 24.00HRS 1.00% IN 24.00HRS DATA STORAGE: SECONDARY: PERISHABILITY: ARCHIVAL: 50.00 KBYTES 50.00 KBYTES

\* OF DISPLAYS: 2 2

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 5.1.2.1PNAME: LOAD SCHEDULING

DATA SOURCES:

METHODOLOGY: ENGINEERING ESTIMATE

RESPONSE TIME: I/O DELAY ALLOWABLE: 120000.00 msec

COMMAND/CONTROL: LEVEL: I LOCATION: G,O RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

IOC GROWTH REQUIREMENTS: 10.00 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 10.00 KIPC .

REPETITION RATE: 1.00/DA 4.00 KBYTES 1.00/DA 8.00 KBYTES PROCESSOR MEMORY: PROGRAM SIZE: DATA REQUIREMENT: 4.00 KBYTES 40.00 KBYTES 8.00 KBYTES

DATA STORAGE: SECONDARY: 40.00 KBYTES GE: SECONDAR.. PERISHABILITY: 1.00% IN 24.00HRS 1.00% IN 24.00HRS

ARCHIVAL: 40.00 KEYTES 40.00 KEYTES # OF DISPLAYS: 0

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FUNCTION NO: 5.1.2.2 NAME: SYSTEM EXECUTIVE

DATA SOURCES: SPACE SHUTTLE (OPER SYS); SUBACS (NTWK OPER SYS)

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE: 0.00 msec

LOCATION: N RATE: 0.00 COMMAND/CONTROL: LEVEL: A

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

0.00% IN 0.00HRS 0.00% IN 0.00HRS 120.00 KEYTES 160.00 KEYTES ARCHIVAL:

\* OF DISPLAYS: 0 ٥

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 5.1.2.2PNAME: SYSTEM EXECUTIVE

DATA SOURCES: SPACE SHUTTLE (OPER SYS); SUBACS (NTWK OPER SYS)

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE: 0.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: N RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: DATA PROCESSING INSTRUCTIONS PER CYCLE:

| IOC | GROWTH | 1.00 KIPC | 1.30 KIPC | 1.30 KIPC | 1.30 KIPC | 100.00/S | 100.00/S | 570.00 KEYTES | 700.00 KEYTES | 1300.00 KEYTES | 200.00 KEYTES | 260.00 PROCESSING INSTRUCTIONS FER CICLE.

REPETITION RATE:

PROCESSOR MEMORY: PROGRAM SIZE:

DATA REQUIREMENT:

DATA STORAGE: SECONDARY:

PERISHBILITY:

ARCHIVAL:

0.00% IN 0.00HRS 0.00% IN 0.00HRS 120.00 KEYTES 160.00 KEYTES

FUNCTION NO: 5.1.2.3 NAME: INITIALIZATION CONFIGURATION CONTROL

DATA SOURCES: EST AT 5 TIMES SPACE SHUTTLE INITIALIZATION S/W

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE:

120000.00 msec

LOCATION: G.O RATE: 0.00 COMMAND/CONTROL: LEVEL: M, I

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

IOC REQUIREMENTS: GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 100.00 KIPC 200.00 KIPC REPETITION RATE: 1.00/ 1.00/

PROCESSOR MEMORY: PROGRAM SIZE: 30.00 KEYTES 50.00 KBYTES DATA REQUIREMENT: DATA STORAGE: SECONDARY:

PERISHABILITY: ARCHIVAL: 0.00% IN 24.00HRS 0.00% IN 24.00HRS 0.00 KEYTES 0.00 KBYTES

\* OF DISPLAYS: 4 6

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 5.1.2.3PNAME: INITIALIZATION CONFIGURATION CONTROL

DATA SOURCES: EST AT 5 TIMES SPACE SHUTTLE INITIALIZATION S/W

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE: 120000.00 msec

COMMAND/CONTROL: LEVEL: M.I LOCATION: G,O RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: 0 INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH

DATA PROCESSING INSTRUCTIONS PER CYCLE: 100.00 KIPC 200.00 KIPC REPETITION RATE: 1.00/ 1.00/

PROCESSOR MEMORY: PROGRAM SIZE: 30.00 KBYTES 50.00 KBYTES DATA REQUIREMENT: 30.00 KBYTES

18.00 KBYTES 50.00 KBYTES DATA STORAGE: SECONDARY: PERISHABILITY: 100.00 KBYTES 0.00% IN 24.00HRS 0.00% IN 24.00HRS

ARCHIVAL: 0.00 KBYTES 0.00 KBYTES \* OF DISPLAYS:

٥ 0

FUNCTION NO: 5.1.2.4 NAME: CONFIGURE DATA PROCESSING EQUIPMENT

DATA SOURCES: EST AT 5 TIMES SPACE SHUTTLE SYST CTRL S/W

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE:

10000.00 msec

COMMAND/CONTROL: LEVEL: N LOCATION: O,G RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

PHYSICAL LOCATION CODE: M SYSTEM DEPENDENCY CODE: I

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC
DATA PROCESSING INSTRUCTIONS PER CYCLE: 20.00 KIPC GROWTH 40.00 KIPG REPETITION RATE:
PROCESSOR MEMORY: PROGRAM SIZE: 1.00/DA 1.00/DA

1.00/DA 50.00 KBYTES 100.00 KBYTES 125.00 KBYTES 200.00 KBYTES 200.00 KBYTES 400.00 KBYTES 125.00 KBYTES 200.00 KBYTES 200.00 KBYTES 400.00 KBYTES 0.00% IN 24.00HRS 0.00% IN 24.00HRS DATA REQUIREMENT: DATA STORAGE: SECONDARY:

PERISHABILITY: ARCHIVAL: 0.00 KEYTES 0.00 KEYTES \* OF DISPLAYS: 4 6

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 5.1.2.4PNAME: CONFIGURE DATA PROCESSING EQUIPMENT

DATA SOURCES: EST AT 5 TIMES SPACE SHUTTLE SYST CTRL S/W

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE: 10000.00 msec

COMMAND/CONTROL: LEVEL: N LOCATION: O.G RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH 20.00 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 40.00 KIPC

REPETITION RATE: PROCESSOR MEMORY: PROGRAM SIZE:
DATA REQUIREMENT: 1.00/DA 1.00/DA 25.00 KBYTES 50.00 KBYTES 65.00 KBYTES 100.00 KBYTES 100.00 KBYTES

DATA STORAGE: SECONDARY:

PERISHABILITY:

ARCHIVAL:

100.00 KBYTES

0.00% IN 24.00HRS

0.00 KBYTES

0.00 KBYTES

FUNCTION NO: 5.1.2.5 NAME: FACILITY STATUS

DATA SOURCES: EST AT 5 TIMES SPACE SHUTTLE GPC/TERMINAL UNIT C/O

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE: 10000.00 msec

COMMAND/CONTROL: LEVEL: A.I LOCATION: O.G RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 10.00 KIPC 20.00 KIPC REPETITION RATE: 1.00/DA 1.00/DA PROCESSOR MEMORY: PROGRAM SIZE:
DATA REQUIREMENT: 22.00 KBYTES 40.00 KBYTES

22.00 KBYTES 40.00 KBYTES 60.00 KBYTES 80.00 KBYTES 100.00 KBYTES 150.00 KBYTES 0.00% IN 24.00HRS 0.00% IN 24.00HRS DATA STORAGE: SECONDARY:

PERISHABILITY: ARCHIVAL: 0.00 KBYTES 0.00 KBYTES

\* OF DISPLAYS: 2 4

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 5.1.2.5PNAME: FACILITY STATUS

DATA SOURCES: EST AT 5 TIMES SPACE SHUTTLE GPC/TERMINAL UNIT C/O

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE: 10000.00 msec

LOCATION: O,G RATE: 0.00 COMMAND/CONTROL: LEVEL: A.I

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS:
DATA PROCESSING INSTRUCTIONS PER CYCLE: IOC GROWTH

10.00 KIPC 20.00 KIPC REPETITION RATE: 1.00/DA 1.00/DA PROCESSOR MEMORY: PROGRAM SIZE: 22.00 KBYTES 40.00 KBYTES

60.00 KBYTES 100.00 KBYTES DATA REQUIREMENT: 80.00 KEYTES 150.00 KBYTES DATA STORAGE: SECONDARY:

PERISHABILITY: 0.00% IN 24.00HRS 0.00% IN 24.00HRS O.OO KEYTES O.OO KBYTES

ARCHIVAL: \* OF DISPLAYS: 0 ٥

FUNCTION NO: 5.1.2.6 NAME: RECONFIGURE/DISCONNECT PAYLOADS & CORE SYSTEMS

DATA SOURCES: EST AT 3 TIMES SHUTTLE SM(BASIS); 10 TIMES DATA

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE:

10000.00 msec

COMMAND/CONTROL: LEVEL: A.I

LOCATION: O.G RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: 10C GROWTH
DATA PROCESSING INSTRUCTIONS PER CYCLE: 30.00 KIPC 50.00 KIPC
1.00/S 1.00/S

PROCESSOR MEMORY: PROGRAM SIZE:

| REPETITION RATE: | 1.00/S | DATA REQUIREMENT: DATA STORAGE: SECONDARY:
PERISHABILITY:
ARCHIVAL:
OF DISPLAYS:

6 10

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 5.1.2.6PNAME: RECONFIGURE/DISCONNECT PAYLOADS & CORE SYSTEMS

DATA SOURCES: EST AT 3 TIMES SHUTTLE SM(BASIS); 10 TIMES DATA

**METHODOLOGY:** 

RESPONSE TIME: I/O DELAY ALLOWABLE: 10000.00 msec

COMMAND/CONTROL: LEVEL: A.I LOCATION: O.G RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: 0 INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 30.00 KIPC 50.00 KIPC REPETITION RATE: 1.00/S 1.00/S

65.00 KBYTES PROCESSOR MEMORY: PROGRAM SIZE: 80.00 KBYTES 140.00 KBYTES 640.00 KBYTES DATA REQUIREMENT: 160.00 KBYTES

DATA STORAGE: SECONDARY:
PERISHABILITY:
ARCHIVAL:
OF DISPLAYS: 640.00 KEYTES 500.00 A2.12. 0.00% IN 24.00HRS 0.00% IN 24.00HRS 0.00 KEYTES 0.00 KEYTES

FUNCTION NO: 5.1.2.7 NAME: DEVICE MANAGEMENT

DATA SOURCES:

METHODOLOGY: ENGINEERING ESTIMATE

RESPONSE TIME: I/O DELAY ALLOWABLE:

2000.00 msec

LOCATION: O.G RATE: 0.00 COMMAND/CONTROL: LEVEL: I

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

· IOC GROWTH REQUIREMENTS: DATA PROCESSING INSTRUCTIONS PER CYCLE: 1.00 KIPC 2.00 KIPC

REPETITION RATE: 10.00/MN 10.00/MN PROCESSOR MEMORY: PROGRAM SIZE: 10.00 KBYTES 20.00 KEYTES DATA REQUIREMENT: 30.00 KBYTES

20.00 KBYTES 40.00 KBYTES DATA STORAGE: SECONDARY: 60.00 KBYTES PERISHABILITY: ARCHIVAL: 0.00% IN 24.00HRS 0.00% IN 24.00HRS

0.00 KEYTES 0.00 KEYTES \* OF DISPLAYS: 2 4

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 5.1.2.7PNAME: DEVICE MANAGEMENT

DATA SOURCES:

METHODOLOGY: ENGINEERING ESTIMATE

RESPONSE TIME: I/O DELAY ALLOWABLE: 2000.00 msec

COMMAND/CONTROL: LEVEL: I LOCATION: O.G RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

IOC REQUIREMENTS: GROWTH 1.00 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 2.00 KIPC

REPETITION RATE: 10.00/MN 10.00/MN 5.00 KBYTES PROCESSOR MEMORY: PROGRAM SIZE: DATA REQUIREMENT: 10.00 KBYTES 10.00 KBYTES 20.00 KBYTES 15.00 KBYTES

DATA STORAGE: SECONDARY: 30.00 KBYTES 0.00% IN 24.00HRS 0.00% IN 24.00HRS

PERISHABILITY: ARCHIVAL: O.OO KBYTES 0.00 KBYTES

\* OF DISPLAYS: 0

SSDS FUNCTIONAL DATA SHEET 20-JUL-1985

FUNCTION NO: 5.1.2.8 NAME: COMMAND INTERFACE PROCESSING

DATA SOURCES:

METHODOLOGY: ENGINEERING ESTIMATE

RESPONSE TIME: I/O DELAY ALLOWABLE:

10000.00 msec

LOCATION: O,G RATE: 0.00 COMMAND/CONTROL: LEVEL: A, I

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

IOC 0.50 KIPC 1.00/S REQUIREMENTS: GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 1.00 KIPC

REPETITION RATE: 1.00/S PROCESSOR MEMORY: PROGRAM SIZE: 15.00 KBYTES 25.00 KEYTES

10.00 KBYTES DATA REQUIREMENT: 5.00 KBYTES DATA STORAGE: SECONDARY: 25.00 KBYTES 40.00 KBYTES

PERISHABILITY: ARCHIVAL: 0.00% IN 24.00HRS 0.00% IN 24.00HRS 0.00 KBYTES 0.00 KBYTES

\* OF DISPLAYS: 3 5

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 5.1.2.8PNAME: COMMAND INTERFACE PROCESSING

DATA SOURCES:

METHODOLOGY: ENGINEERING ESTIMATE

10000.00 msec RESPONSE TIME: I/O DELAY ALLOWABLE:

LOCATION: O.G RATE: 0.00 COMMAND/CONTROL: LEVEL: A.I

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

PHYSICAL LOCATION CODE: H SYSTEM DEPENDENCY CODE: I

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

GROWTH REQUIREMENTS: IOC 0.50 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 1.00 KIPC REPETITION RATE: 1.00/S 1.00/S

PROCESSOR MEMORY: PROGRAM SIZE:
DATA REQUIREMENT:
DATA STORAGE: SECONDARY: 12.00 KBYTES 20.00 KBYTES 8.00 KBYTES 4.00 KBYTES 20.00 KBYTES 16.00 KBYTES

PERISHABILITY: ARCHIVAL: 0.00% IN 24.00HRS 0.00% IN 24.00HRS 0.00 KBYTES 0.00 KBYTES

\* OF DISPLAYS: 0 20-JUL-1985

SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 5.1.3.1 NAME: DISPLAY AND CONTROL DEVICE MANAGEMENT

DATA SOURCES:

METHODOLOGY: ENGINEERING ESTIMATE

RESPONSE TIME: I/O DELAY ALLOWABLE:

10000.00 msec

COMMAND/CONTROL: LEVEL: A.I

LOCATION: O.I RATE:

0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE:

0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I

PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: 0 INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.30 KIPC 0.20 KIPC REPETITION RATE: 1.00/S 1.00/S PROCESSOR MEMORY: PROGRAM SIZE: 0.40 KBYTES 0.50 KBYTES DATA REQUIREMENT: 0.20 KBYTES 0.30 KBYTES DATA STORAGE: SECONDARY: 0.00 KBYTES 0.00 KBYTES

PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS ARCHIVAL: 0.00 KBYTES 0.00 KBYTES

OF DISPLATS:

FUNCTION NO: 5.1.3.2 NAME: DISPLAY AND CONTROL COMMAND INTERFACE PROCESSING

DATA SOURCES:

METHODOLOGY: ENGINEERING ESTIMATE

RESPONSE TIME: I/O DELAY ALLOWABLE:

10000.00 msec

COMMAND/CONTROL: LEVEL: I

LOCATION: G,O RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE:

0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I

PHYSICAL LOCATION CODE: H

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.05 KIPC 0.10 KIPC REPETITION RATE: 1.00/S 1.00/S PROCESSOR MEMORY: PROGRAM SIZE: 0.20 KBYTES 0.40 KBYTES DATA REQUIREMENT: 0.10 KEYTES 0.20 KBYTES DATA STORAGE: SECONDARY: 0.00 KEYTES

0.00 KBYTES 0.00% IN 0.00HRS 0.00% IN 0.00HRS PERISHABILITY: ARCHIVAL: 0.00 KEYTES 0.00 KBYTES

+ OF DISPLAYS: 0 0

FUNCTION NO: 5.2.1 NAME: INTERFACE MANAGEMENT

DATA SOURCES: Experience

METHODOLOGY: Engineering analysis based on typical control center operation.

RESPONSE TIME: I/O DELAY ALLOWABLE:

5000.00 msec

COMMAND/CONTROL: LEVEL: A

LOCATION: G

RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 100.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G

PHYSICAL LOCATION CODE: G

IOC

DIAGNOSTICS/SELF TEST: REQUIRED: Y

NUMBER: 1 INTERVAL: 5.00 SEC

REQUIREMENTS: DATA PROCESSING INSTRUCTIONS PER CYCLE: REPETITION RATE:

5.00 KIPC 1.00/SEC 15.00 KEYTES

GROWTH 7.00 KIPC 1.00/SEC 20.00 KBYTES

PROCESSOR MEMORY: PROGRAM SIZE: DATA REQUIREMENT: DATA STORAGE: SECONDARY: PERISHABILITY:

30.00 KBYTES 0.00 KBYTES 0.00% IN 0.00HRS 0.00% IN 0.00HRS O.OO KEYTES

35.00 KEYTES 0.00 KBYTES

ARCHIVAL: \* OF DISPLAYS:

8

0.00 KBYTES

SSDS FUNCTIONAL DATA SHEET 20-JUL-1985

FUNCTION NO: 5.2.2 NAME: SCHEDULE/STATUS COMPARE

DATA SOURCES: EXPERIENCE

METHODOLOGY: ENGINEERING ANALYSIS BASED ON TYPICAL CONTROL CENTER OPERATION.

RESPONSE TIME: I/O DELAY ALLOWABLE:

5000.00 msec

COMMAND/CONTROL: LEVEL: A

LOCATION: G

RATE: 0.00

GROWTH .

25.00 KIPC

1.00/SEC

70.00 KBYTES

DATA QUALITY: MAXIMUM BIT ERROR RATE: 100.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G

PHYSICAL LOCATION CODE: G

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 1 INTERVAL: 5.00 SEC

REQUIREMENTS: IOC DATA PROCESSING INSTRUCTIONS PER CYCLE: 20.00 KIPC REPETITION RATE: 1.00/SEC PROCESSOR MEMORY: PROGRAM SIZE: 60.00 KEYTES DATA REQUIREMENT: 120.00 KBYTES

200.00 KBYTES DATA STORAGE: SECONDARY: 0.00 KEYTES 0.00 KEYTES PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

0.00 KBYTES ARCHIVAL: 0.00 KEYTES

\* OF DISPLAYS: . 20 25

FUNCTION NO: 5.2.3 NAME: TRANSMIT RECONFIGURATION SCHEDULE

DATA SOURCES: EXPERIENCE

METHODOLOGY: ENGINEERING ANALYSIS BASED ON TYPICAL CONTROL CENTER OPERATION

RESPONSE TIME: I/O DELAY ALLOWABLE: 500.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: G RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 100.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: G

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 1 INTERVAL: 5.00 SEC

GROWTH REQUIREMENTS: IOC 50.00 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 60.00 KIPC 1.00/S 1.00/S REPETITION RATE: PROCESSOR MEMORY: PROGRAM SIZE: 150.00 KBYTES 180.00 KBYTES DATA REQUIREMENT: 600.00 KBYTES 900.00 KEYTES 7500.00 KBYTES DATA STORAGE: SECONDARY: 5000.00 KBYTES

PERISHABILITY: 0.00% IN 1.00HRS 0.00% IN 1.00HRS
ARCHIVAL: 0.00 KEYTES 0.00 KEYTES

**+** OF DISPLATS: 40 60

FUNCTION NO: 5.2.4 NAME: GROUND STATUS DATABASE MANAGEMENT

DATA SOURCES: EXPERIENCE

METHODOLOGY: ENGINEERING ANALYSIS BASED ON TYPICAL CONTROL CENTER OPERATION

RESPONSE TIME: I/O DELAY ALLOWABLE: 500.00 msec

COMMAND/CONTROL: LEVEL: A LOGATION: G RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 100.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: G

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 1 INTERVAL: 5.00 SEC

REQUIREMENTS: IOC GROWTH 10.00 KIPG DATA PROCESSING INSTRUCTIONS PER CYCLE: 12.00 KIPC REPETITION RATE: 1.00/8 1.00/S PROCESSOR MEMORY: PROGRAM SIZE: 30.00 KBYTES 35.00 KBYTES DATA REQUIREMENT: 60.00 KBYTES 70.00 KBYTES DATA STORAGE: SECONDARY: 200.00 KBYTES 250.00 KEYTES

PERISHABILITY: 0.00% IN 1.00HRS 0.00% IN 1.00HRS
ARCHIVAL: 0.00 KEYTES 0.00 KEYTES

**\*** OF DISPLAYS: 40 45

FUNCTION NO: 5.2.5 NAME: ADJUST FOR UNSCHEDULED MODE CHANGES

DATA SOURCES: EXPERIENCE

METHODOLOGY: ENGINEERING ANALYSIS BASED ON TYPICAL CONTROL CENTER OPERATION

RESPONSE TIME: I/O DELAY ALLOWABLE: 500.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: G RATE: 100.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 100.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: G

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 1 INTERVAL: 5.00 SEC

REQUIREMENTS: IOC GROWTH
DATA PROCESSING INSTRUCTIONS PER CYCLE: 20.00 KIPC 25.00 KIPC
REPETITION RATE: 1.00/S 1.00/S
PROCESSOR MEMORY: PROGRAM SIZE: 60.00 KBYTES 75.00 KBYTES

DATA REQUIREMENT: 120.00 KBYTES 150.00 KBYTES
DATA STORAGE: SECONDARY: 5000.00 KBYTES 7500.00 KBYTES

PERISHABILITY: 0.00% IN 1.00HRS 0.00% IN 1.00HRS
ARCHIVAL: 0.00 KEYTES 0.00 KEYTES

\* OF DISPLAYS: 50 75

NAME: INTERPRET MODEL REQUESTS FUNCTION NO: 6.1

DATA SOURCES:

METHODOLOGY: ENGINEERING ESTIMATE

10000.00 msec RESPONSE TIME: I/O DELAY ALLOWABLE:

COMMAND/CONTROL: LEVEL: I LOCATION: G RATE: 0.10

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: S PHYSICAL LOCATION CODE: G

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: O INTERVAL: 60.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 8.00 KIPC 16.00 KIPC REPETITION RATE: 1.00/HR 1.00/HR PROCESSOR MEMORY: PROGRAM SIZE: 32.00 KBYTES 64.00 KBYTES DATA REQUIREMENT: 24.00 KBYTES 128.00 KBYTES 48.00 KBYTES DATA STORAGE: SECONDARY:

256.00 KBYTES PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS ARCHIVAL: 0.00 KBYTES

0.00 KBYTES \* OF DISPLAYS: 0

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SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 6.2

NAME: DEVELOP COMMUNICATIONS MODEL CONFIGURATION

DATA SOURCES:

METHODOLOGY: ENGINEERING ESTIMATE

RESPONSE TIME: I/O DELAY ALLOWABLE:

100000.00 msec

COMMAND/CONTROL: LEVEL: A

LOCATION: G

RATE:

0.10

DATA QUALITY: MAXIMUM BIT ERROR RATE:

1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G

PHYSICAL LOCATION CODE: G

IOC

DIAGNOSTICS/SELF TEST: REQUIRED: Y

NUMBER: O INTERVAL: 3600.00 SEC

REQUIREMENTS: DATA PROCESSING INSTRUCTIONS PER CYCLE:

30.00 KIPC 1.00/DAY

GROWTH

REPETITION RATE: PROCESSOR MEMORY: PROGRAM SIZE:

256.00 KBYTES

50.00 KIPC 1.00/DAY 1000.00 KEYTES 512.00 KEYTES

DATA REQUIREMENT: DATA STORAGE: SECONDARY:

128.00 KEYTES 1000.00 KBYTES

2000.00 KBYTES

PERISHABILITY: ARCHIVAL:

0.00 KEYTES

0.00% IN 0.00HRS 0.00% IN 0.00HRS 0.00 KBYTES

\* OF DISPLAYS:

0

SSDS FUNCTIONAL DATA SHEET 20-JUL-1985

FUNCTION NO: 6.3 NAME: SIMULATE SPACE STATION SYSTEM COMM ELEMENTS

DATA SOURCES: SPACELAB INTEGRATION

METHODOLOGY: ENGINEERING ESTIMATE

RESPONSE TIME: I/O DELAY ALLOWABLE: 100.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: G RATE: 0.10

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: G

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: O INTERVAL: 60.00 SEC

· REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 64.00 KIPC 192.00 KIPC 1.00/DAY REPETITION RATE: 2.00/DAY 512.00 KEYTES 256.00 KEYTES PROCESSOR MEMORY: PROGRAM SIZE: 1000.00 KBYTES DATA REQUIREMENT: 512.00 KBYTES DATA STORAGE: SECONDARY: 1000.00 KBYTES 2000.00 KBYTES PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

ARCHIVAL: 0.00 KEYTES 0.00 KBYTES \* OF DISPLAYS: 0 0

FUNCTION NO: 6.4 NAME: DEVELOP HARDWARE INTEGRATION CONFIGURATION

DATA SOURCES:

METHODOLOGY: ENGINEERING ESTIMATE

RESPONSE TIME: I/O DELAY ALLOWABLE: 100000.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: G RATE: 0.10

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: G

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 0 INTERVAL: 3600.00 SEC

REQUIREMENTS: IOC GROWTH

DATA PROCESSING INSTRUCTIONS PER CYCLE: 1.00 KIPC 2.00 KIPC

REPETITION RATE: 1.00/HR 1.00/HR

PROCESSOR MEMORY: PROGRAM SIZE: 256.00 KEYTES 512.00 KEYTES

DATA REQUIREMENT: 128.00 KEYTES 256.00 KEYTES

DATA STORAGE: SECONDARY: 1000.00 KEYTES 1000.00 KEYTES
PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

ARCHIVAL: 0.00 KEYTES 0.00 KEYTES

OF DISPLAYS: 0

FUNCTION NO: 6.5 NAME: SIMULATE SPACE STATION ELEMENTS

DATA SOURCES: SPACELAB INTEGRATION

METHODOLOGY: ENGINEERING ESTIMATE

RESPONSE TIME: I/O DELAY ALLOWABLE:

100.00 msec

COMMAND/CONTROL: LEVEL: A,I LOCATION: G RATE: 0.10

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: G

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: O INTERVAL: 60.00 SEC

REQUIREMENTS: IOC GROWTH
DATA PROCESSING INSTRUCTIONS PER CYCLE: 2.00 KIPC 4.00 KIPC
REPETITION RATE: 1.00/HR 1.00/HR
PROCESSOR MEMORY: PROGRAM SIZE: 256.00 KBYTES 512.00 KBYTES

DATA REQUIREMENT: 128.00 KBYTES 256.00 KBYTES

DATA STORAGE: SECONDARY: 1000.00 KBYTES 2000.00 KBYTES PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

ARCHIVAL: 0.00% IN 0.000RS 0.00% IN 0.000RS

# OF DISPLAYS: 0.00 KBYTES 0.00 KBYTES

0 0

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SSDS FUNCTIONAL DATA SHEET 20-JUL-1985

FUNCTION NO: 6.6 NAME: DEVELOP SOFTWARE INTEGRATION CONFIGURATION

DATA SOURCES: SPACELAB INTEGRATION

METHODOLOGY: ENGINEERING ESTIMATE

RESPONSE TIME: I/O DELAY ALLOWABLE: 100000.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: G RATE: 0.10

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G PHYSICAL LOCATION CODE: G

60.00 SEC DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: O INTERVAL:

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 20.00 KIPC 40.00 KIPC 1.00/HR REPETITION RATE: 1.00/HR 256.00 KEYTES 128.00 KEYTES PROCESSOR MEMORY: PROGRAM SIZE: 128.00 KEYTES DATA REQUIREMENT: 64.00 KBYTES DATA STORAGE: SECONDARY: 1000.00 KBYTES 1000.00 KBYTES

PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS ARCHIVAL: 0.00 KBYTES 0.00 KBYTES \* OF DISPLAYS: 0 0

NAME: SIMULATE SPACE STATION PROCESSORS FUNCTION NO: 6.7

DATA SOURCES: SPACELAB INTEGRATION METHODOLOGY: ENGINEERING ESTIMATE

RESPONSE TIME: I/O DELAY ALLOWABLE: 100.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: G RATE: 0.10

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: G

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: O INTERVAL: 60.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 4.00 KIPC 2.00 KIPC REPETITION RATE: 1.00/HR 1.00/HR PROCESSOR MEMORY: PROGRAM SIZE: 256.00 KEYTES 512.00 KBYTES DATA REQUIREMENT: 128.00 KBYTES 256.00 KBYTES DATA STORAGE: SECONDARY: 512.00 KEYTES 1000.00 KBYTES PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

ARCHIVAL: O.OO KEYTES 0.00 KBYTES \* OF DISPLAYS: 0 0

SSDS FUNCTIONAL DATA SHEET 20-JUL-1985

FUNCTION NO: 6.8.1 NAME: DEFINE TRAINING PLAN

DATA SOURCES:

METHODOLOGY: BACKGROUND EXPERIENCE

RESPONSE TIME: I/O DELAY ALLOWABLE: 1000.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: G RATE: 0.05

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: N PHYSICAL LOCATION CODE: G

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 3.00 KIPC 4.00 KIPC REPETITION RATE: 1.00/DA 1.00/DA PROCESSOR MEMORY: PROGRAM SIZE: 6.00 KEYTES 8.00 KBYTES DATA REQUIREMENT: 12.00 KBYTES 16.00 KBYTES DATA STORAGE: SECONDARY: 6.00 KBYTES 8.00 KBYTES

100.00% IN 24.00HRS100.00% IN 24.00HRS 0.00 KBYTES 0.00 KBYTES PERISHABILITY: ARCHIVAL: \* OF DISPLAYS:

, **3** 2

FUNCTION NO: 6.8.2 NAME: DEFINE TRAINING SCRIPT

DATA SOURCES:

METHODOLOGY: BACKGROUND EXPERIENCE

RESPONSE TIME: I/O DELAY ALLOWABLE: 1000.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: G RATE: 0.50

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: N PHYSICAL LOCATION CODE: G

DIAGNOSTICS/SELF TEST: REQUIRED: N 0.00 SEC NUMBER: O INTERVAL:

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 3.00 KIPC 5.00 KIPC 1.00/DA REPETITION RATE: 1.00/DA PROCESSOR MEMORY: PROGRAM SIZE: 14.00 KBYTES 18.00 KBYTES DATA REQUIREMENT: 20.00 KBYTES 30.00 KEYTES DATA STORAGE: SECONDARY:

14.00 KBYTES 30.00 KBYTES 100.00% IN 24.00HRS100.00% IN 24.00HRS PERISHABILITY: 0.00 KBYTES ARCHIVAL: 0.00 KBYTES

\* OF DISPLAYS: 3

FUNCTION NO: 6.8.3 NAME: DEFINE MODEL REQUIREMENTS

DATA SOURCES:

METHODOLOGY: BACKGROUND EXPERIENCE

RESPONSE TIME: I/O DELAY ALLOWABLE: 1000.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: G RATE: 0.50

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: N PHYSICAL LOCATION CODE: G

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH 2.00 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 3.00 KIPC REPETITION RATE: 1.00/DA 1.00/DA PROCESSOR MEMORY: PROGRAM SIZE: 12.00 KBYTES 18.00 KBYTES DATA REQUIREMENT: 16.00 KBYTES 20.00 KBYTES DATA STORAGE: SECONDARY: 12.00 KEYTES 18.00 KBYTES

PERISHABILITY: 100.00% IN 24.00HRS100.00% IN 24.00HRS
ARCHIVAL: 0.00 KEYTES 0.00 KEYTES

\* OF DISPLAYS: 1 2

FUNCTION NO: 6.8.4 NAME: CONFIGURE SIMULATION

DATA SOURCES:

METHODOLOGY: BACKGROUND EXPERIENCE

RESPONSE TIME: I/O DELAY ALLOWABLE:

1000.00 msec

COMMAND/CONTROL: LEVEL: A

LOCATION: O.G RATE:

0.50

0.50 SEC

3.00 KIPC 4.00/DA

18.00 KEYTES

DATA QUALITY: MAXIMUM BIT ERROR RATE:

0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: N

PHYSICAL LOCATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 4 INTERVAL:

IOC GROWTH

DATA PROCESSING INSTRUCTIONS PER CYCLE: 2.00 KIPC REPETITION RATE: 4.00/DA

PROCESSOR MEMORY: PROGRAM SIZE: 16.00 KBYTES
DATA REQUIREMENT: 36.00 KBYTES
DATA STORAGE: SECONDARY: 32.00 KBYTES

REQUIREMENTS:

36.00 KBYTES 40.00 KBYTES 32.00 KBYTES 38.00 KBYTES 100.00% IN 12.00HRS100.00% IN 12.00HRS 0.00 KBYTES 0.00 KBYTES

PERISHABILITY:
ARCHIVAL:
OF DISPLAYS:

FUNCTION NO: 6.8.5 NAME: CONDUCT TRAINING EXERCISE

DATA SOURCES:

METHODOLOGY: BACKGROUND EXPERIENCE

RESPONSE TIME: I/O DELAY ALLOWABLE:

80.00 msec

COMMAND/CONTROL: LEVEL: I

LOCATION: O.G RATE:

1.00

0.08 SEC

DATA QUALITY: MAXIMUM BIT ERROR RATE:

0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: N

PHYSICAL LOCATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 26 INTERVAL:

REQUIREMENTS: IOC GROWTH
DATA PROCESSING INSTRUCTIONS PER CYCLE: 4.00 KIPC 6.00 KIPC
REPETITION RATE: 2.00/S 2.00/S
PROCESSOR MEMORY: PROGRAM SIZE: 64.00 KBYTES 80.00 KBYTES

DATA REQUIREMENT: 64.00 KBYTES 80.00 KBYTES
DATA STORAGE: SECONDARY: 20.00 KBYTES 30.00 KBYTES

PERISHABILITY: 100.00% IN 4.00HRS100.00% IN 4.00HRS
ARCHIVAL: 0.00 KBYTES 0.00 KBYTES

OF DISPLAYS: 0

FUNCTION NO: 6.8.6 NAME: EVALUATE OPERATOR PERFORMANCE

DATA SOURCES:

METHODOLOGY: BACKGROUND EXPERIENCE

RESPONSE TIME: I/O DELAY ALLOWABLE:

80.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: G RATE: 0.50

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: N PHYSICAL LOCATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 3 INTERVAL: 1.00 SEC

REQUIREMENTS: IOC GROWTH
DATA PROCESSING INSTRUCTIONS PER CYCLE: 3.00 KIPC 5.00 KIPC
REPETITION RATE: 12.50/S 12.50/S

PROCESSOR MEMORY: PROGRAM SIZE: 12.00 KBYTES 16.00 KBYTES

DATA REQUIREMENT: 12.00 KBYTES 16.00 KBYTES
DATA STORAGE: SECONDARY: 12.00 KBYTES 16.00 KBYTES

PERISHABILITY: 100.00% IN 24.00HRS100.00% IN 24.00HRS
ARCHIVAL: 0.00 KBYTES 0.00 KBYTES

+ OF DISPLAYS: 1 2

FUNCTION NO: 6.8.7 NAME: MAINTAIN OPERATOR TRAINING STATUS

DATA SOURCES:

METHODOLOGY: BACKGROUND EXPERIENCE

RESPONSE TIME: I/O DELAY ALLOWABLE:

1000.00 msec

LOCATION: G COMMAND/CONTROL: LEVEL: A RATE: 0.05

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: N PHYSICAL LOCATION CODE: G

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 2.00 KIPC 3.00 KIPC REPETITION RATE: 1.00/S 1.00/S PROCESSOR MEMORY: PROGRAM SIZE: 6.00 KEYTES 9.00 KEYTES

DATA REQUIREMENT: 8.00 KBYTES 10.00 KBYTES DATA STORAGE: SECONDARY: 8.00 KBYTES 10.00 KBYTES

PERISHABILITY: 100.00% IN 24.00HRS100.00% IN 24.00HRS 128.00 KBYTES ARCHIVAL: 180.00 KBYTES

• OF DISPLAYS: 2

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SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 6.9.1 NAME: CONFIGURATION CONTROL & MANAGEMENT SUPPORT

DATA SOURCES: NASA PROJECTS/CONTRACTOR DOCUMENTS/PROCEDURES/SIZING

METHODOLOGY: NASA S/W CONF. CONTROL PAST POLICIES; PLUS SHUTTLE

EXPERIENCE SIZING

RESPONSE TIME: I/O DELAY ALLOWABLE:

500.00 msec

COMMAND/CONTROL: LEVEL: I,M

LOCATION: U.G RATE:

1.00

DATA QUALITY: MAXIMUM BIT ERROR RATE:

1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: N

PHYSICAL LOCATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED:

NUMBER: O INTERVAL:

0.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.00 KIPC 0.00 KIPC REPETITION RATE: 0.00/ 0.00/

PROCESSOR MEMORY: PROGRAM SIZE: 1200.00 KEYTES 0.00 KEYTES 1200.00 KBYTES

DATA REQUIREMENT: 0.00 KBYTES 50000000.00 KEYTES DATA STORAGE: SECONDARY: 75000000.00 KBYTES PERISHABILITY:

0.00% IN 0.00HRS 0.00% IN 0.00HRS 50000000.00 KEYTES ARCHIVAL: 75000000.00 KBYTES

\* OF DISPLAYS: 25 25

FUNCTION NO: 6.9.2 NAME: REQUIREMENTS ANALYSIS & GENERATION TOOLS

DATA SOURCES: NASA PROJECTS/CONTRACTOR DOCUMENTS/PROCEDURES/SIZING

METHODOLOGY: NEED BETTER REQUIREMENTS ACCESS AND TOOLS. SHUTTLE

EXPERIENCE USED FOR SIZING

RESPONSE TIME: I/O DELAY ALLOWABLE: 500.00 msec

COMMAND/CONTROL: LEVEL: I.M LOCATION: U RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: N PHYSICAL LOCATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED: NUMBER: 0 INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH

DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.00 KIPC 0.00 KIPC

REPETITION RATE: 0.00/DA 0.00/

PROCESSOR MEMORY: PROGRAM SIZE: 600.00 KEYTES 0.00 KEYTES

DATA REQUIREMENT: 0.00 KBYTES 0.00 KBYTES

DATA STORAGE: SECONDARY: 100000000.00 KBYTES 200000000.00 KBYTES PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS ARCHIVAL: 200000000.00 KBYTES 400000000.00 KBYTES

OF DISPLAYS: 5

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 6.9.3 NAME: DESIGN & CODE GENERATION

DATA SOURCES: NASA PROJECTS/CONTRACTOR DOCUMENTS/PROCEDURES/SIZING

METHODOLOGY: NEED IMPROVED TOOLS & SUPPORT OF DISTRIBUTED USERS.

RESPONSE TIME: I/O DELAY ALLOWABLE: 500.00 msec

COMMAND/CONTROL: LEVEL: I,M LOCATION: U RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: N PHYSICAL LOCATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED: NUMBER: 0 INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH
DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.00 KIPC . 0.00 KIPC

REPETITION RATE: 0.00/DA 0.00/

PROCESSOR MEMORY: PROGRAM SIZE: 4200.00 KBYTES 0.00 KBYTES
DATA REQUIREMENT: 0.00 KBYTES 0.00 KBYTES

DATA STORAGE: SECONDARY: 500000000.00 KBYTES 500000000.00 KBYTES
PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS
ARCHIVAL: 500000000.00 KEYTES 700000000.00 KEYTES

OF DISPLAYS: 20

FUNCTION NO: 6.9.4 NAME: SYSTEM BUILD & DELIVERY

DATA SOURCES: NASA PROJECTS/CONTRACTORS/PROCEDURES/SIZING

METHODOLOGY: NEED DISTRIBUTED ACCESS PROCESS

RESPONSE TIME: I/O DELAY ALLOWABLE:

COMMAND/CONTROL: LEVEL: I, M LOCATION: U RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: N PHYSICAL LOCATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED: NUMBER: 0 INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH
DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.00 KIPC 0.00 KIPC

REPETITION RATE: 0.00/DA 0.00/

PROCESSOR MEMORY: PROGRAM SIZE: 6440.00 KBYTES 0.00 KBYTES
DATA REQUIREMENT: 0.00 KBYTES 0.00 KBYTES

DATA REQUIREMENT: 0.00 KBYTES 0.00 KBYTES
DATA STORAGE: SECONDARY: 100000000.00 KBYTES 200000000.00 KBYTES

PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

ARCHIVAL: 300000000.00 KBYTES 600000000.00 KBYTES

500.00 msec

OF DISPLAYS: 25

FUNCTION NO: 6.9.5 NAME: TESTING & ANALYSIS

DATA SOURCES: NASA PROJECTS/CONTRACTORS/PROCEDURES/SIZING

METHODOLOGY: NEED EFFICIENT PROCESS FOR MAINTAINING & INTEGRATING

RECON. DATA

RESPONSE TIME: I/O DELAY ALLOWABLE: 500.00 msec

COMMAND/CONTROL: LEVEL: I,M LOCATION: U RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: N PHYSICAL LOCATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED: NUMBER: 0 INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH

DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.00 KIPC 0.00 KIPC REPETITION RATE: 0.00/DA 0.00/

PROCESSOR MEMORY: PROGRAM SIZE: 5600.00 KBYTES 5600.00 KBYTES

DATA REQUIREMENT: 0.00 KBYTES 0.00 KBYTES

DATA STORAGE: SECONDARY: 100000000.00 KEYTES 100000000.00 KEYTES

PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

ARCHIVAL: 100000000.00 KBYTES 100000000.00 KBYTES

OF DISPLAYS: 40 40

20-JUL-1985

SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 6.9.6

NAME: DOCUMENTATION

DATA SOURCES: NASA PROJECTS/CONTRACTORS/PROCEDURES/SIZING

METHODOLOGY: MUST IMPROVE GENERATION, ACCESS & MAINTENANCE METHODS

FOR ALL S/W DOCUMENTATION

RESPONSE TIME: I/O DELAY ALLOWABLE:

500.00 msec

COMMAND/CONTROL: LEVEL: I.M

LOCATION: U

RATE:

0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE:

0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: N

PHYSICAL LOCATION CODE: M

IOC

DIAGNOSTICS/SELF TEST: REQUIRED:

NUMBER: O INTERVAL:

0.00 SEC

REQUIREMENTS: DATA PROCESSING INSTRUCTIONS PER CYCLE:

0.00 KIPC

GROWTH 0.00 KIPC

REPETITION RATE:

0.00/DA 700.00 KBYTES 0.00/ 0.00 KBYTES

PROCESSOR MEMORY: PROGRAM SIZE: DATA REQUIREMENT:

0.00 KBYTES

0.00 KBYTES

DATA STORAGE: SECONDARY: PERISHABILITY:

300000000.00 KEYTES 500000000.00 KEYTES

0.00% IN 0.00HRS 0.00% IN 0.00HRS

ARCHIVAL: # OF DISPLAYS:

25

300000000.00 KEYTES 500000000.00 KEYTES

FUNCTION NO: 6.9.7 NAME: COMMUNICATIONS

DATA SOURCES: NASA PROJECTS/CONTRACTORS/PROCEDURES/SIZING

METHODOLOGY: NEED WORKABLE COMMUNICATION FUNCTION TO ACCESS S/W.

DOCUMENTS, AND C/O DATA BETWEEN SITES.

RESPONSE TIME: I/O DELAY ALLOWABLE:

500.00 msec

RATE:

COMMAND/CONTROL: LEVEL: I.M

LOCATION: U

0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE:

0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: N

PHYSICAL LOCATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED:

NUMBER:

O INTERVAL:

0.00 SEC

REQUIREMENTS: IOC DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.00 KIPC

REPETITION RATE:

0.00/DA 700.00 KBYTES

GROWTH 0.00 KIPC 0.00/

PROCESSOR MEMORY: PROGRAM SIZE: DATA REQUIREMENT:

0.00 KBYTES 25000000.00 KBYTES

0.00 KEYTES 0.00 KBYTES 0.00 KBYTES

DATA STORAGE: SECONDARY: PERISHABILITY: ARCHIVAL:

0.00% IN 0.00HRS 0.00% IN 0.00HRS 25000000.00 KBYTES

0.00 KBYTES

\* OF DISPLAYS: 20 0

FUNCTION NO: 6.9.8 NAME: RECONFIGURATION DATA MANAGEMENT

DATA SOURCES: NASA PROJECTS/CONTRACTORS/PROCEDURES/SIZING

METHODOLOGY: NEED EFFICIENT PROCESS FOR MAINTAINING AND INTEGRATING RECON

DATA.

RESPONSE TIME: I/O DELAY ALLOWABLE: 500.00 msec

COMMAND/CONTROL: LEVEL: I,M LOCATION: U RATE: 0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE: 0.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: U PHYSICAL LOCATION CODE: M

DIAGNOSTICS/SELF TEST: REQUIRED: NUMBER: 0 INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH
DATA PROCESSING INSTRUCTIONS PER CYCLE: 0.00 KIPC 0.00 KIPC
REPETITION RATE: 0.00/ 0.00/

PROCESSOR MEMORY: PROGRAM SIZE: 5600.00 KBYTES 0.00 KBYTES 0.00 KBYTES 0.00 KBYTES

DATA STORAGE: SECONDARY: 0.00 KEYTES 500000000.00 KEYTES

PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS
ARCHIVAL: 100000000.00 KBYTES 500000000.00 KBYTES

# OF DISPLAYS: 50 0

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SSDS FUNCTIONAL DATA SHEET 20-JUL-1985

FUNCTION NO: 7.1.1 NAME: ANALYZE SYSTEM PERFORMANCE

DATA SOURCES:

**METHODOLOGY:** 

10000.00 msec RESPONSE TIME: I/O DELAY ALLOWABLE:

RATE: 0.01 COMMAND/CONTROL: LEVEL: I LOCATION: G

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: S PHYSICAL LOCATION CODE: G

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: O INTERVAL: 10000.00 SEC

IOC GROWTH REQUIREMENTS: DATA PROCESSING INSTRUCTIONS PER CYCLE: 1000.00 KIPC 1000.00 KIPC 8.00/DA 8.00/DA REPETITION RATE: 1000.00 KBYTES 1000.00 KBYTES PROCESSOR MEMORY: PROGRAM SIZE: 1000.00 KBYTES DATA REQUIREMENT: 1000.00 KBYTES DATA STORAGE: SECONDARY: 0.00 KEYTES 0.00 KBYTES PERISHABILITY:

0.00% IN 0.00HRS 0.00% IN 0.00HRS ARCHIVAL: \* OF DISPLATS: 0.00 KBYTES 0.00 KEYTES 1 1

FUNCTION NO: 7.1.2 NAME: DETERMINE EFFECTS ON INTEGRATED PLAN

DATA SOURCES:

**METHODOLOGY:** 

RESPONSE TIME: I/O DELAY ALLOWABLE:

10000.00 msec

COMMAND/CONTROL: LEVEL: I

LOCATION: G

RATE: 0.01

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I

PHYSICAL LOCATION CODE: G

DIAGNOSTICS/SELF TEST: REQUIRED: Y

NUMBER: O INTERVAL: 10000.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 100.00 KIPC 100.00 KIPC 4.00/HR 4.00/HR REPETITION RATE: 4.00/HR 100000.00 KBYTES PROCESSOR MEMORY: PROGRAM SIZE:

DATA REQUIREMENT: DATA STORAGE: SECONDARY:

PERISHABILITY: ARCHIVAL: \* OF DISPLAYS:

100000.00 KBYTES 0.00 KBYTES 0.00% IN 0.00HRS 0.00% IN 0.00HRS

100000.00 KBYTES 100000.00 KBYTES 0.00 KEYTES

0.00 KBYTES 0.00 KBYTES

SSDS FUNCTIONAL DATA SHEET 20-JUL-1985

FUNCTION NO: 7.1.3 NAME: ANALYZE AFFECTED PLANS

DATA SOURCES:

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE:

10000.00 msec

COMMAND/CONTROL: LEVEL: I

LOCATION: G

RATE: 0.01

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I

PHYSICAL LOCATION CODE: G

DIAGNOSTICS/SELF TEST: REQUIRED: Y

NUMBER: O INTERVAL: 10000.00 SEC

IOC

8

GROWTH

REQUIREMENTS: DATA PROCESSING INSTRUCTIONS PER CYCLE: REPETITION RATE: PROCESSOR MEMORY: PROGRAM SIZE:

DATA REQUIREMENT: DATA STORAGE: SECONDARY: PERISHABILITY: ARCHIVAL:

\* OF DISPLAYS:

0.00 KBYTES 0.00% IN 0.00HRS 0.00 KBYTES

100.00 KIPC 100.00 KIPC 4.00/HR 4.00/HR 100000.00 KEYTES 100000.00 KEYTES 100000.00 KBYTES 100000.00 KBYTES

0.00 KBYTES 0.00% IN 0.00HRS 0.00 KBYTES

FUNCTION NO: 7.1.4 NAME: ANALYZE IMPACT OF PROGRAM CHANGES

DATA SOURCES:

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE:

10000.00 msec

COMMAND/CONTROL: LEVEL: I

LOCATION: G

RATE:

0.00

DATA QUALITY: MAXIMUM BIT ERROR RATE:

1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G

PHYSICAL LOCATION CODE: G

DIAGNOSTICS/SELF TEST: REQUIRED: Y

NUMBER: O INTERVAL:

0.00 SEC

GROWTH

1000.00 KIPC

1.00/DA

1000.00 KBYTES

IOC . REQUIREMENTS: 1000.00 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 1.00/DA REPETITION RATE: PROCESSOR MEMORY: PROGRAM SIZE: 1000.00 KBYTES 1000.00 KEYTES DATA REQUIREMENT: DATA STORAGE: SECONDARY: 0.00 KEYTES PERISHABILITY:

ARCHIVAL:

\* OF DISPLAYS:

0.00% IN 0.00HRS 0.00% IN 0.00HRS 0.00 KBYTES

1000.00 KBYTES 0.00 KBYTES

0.00 KEYTES 1 1

G-225

FUNCTION NO: 7.2 NAME: LOG CUSTOMER USAGE OF SYSTEM

DATA SOURCES:

METHODOLOGY: ENGINEERING ESTIMATE

RESPONSE TIME: I/O DELAY ALLOWABLE: 10000.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: G RATE: 0.01

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: S PHYSICAL LOCATION CODE: R

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: 0 INTERVAL: 0.00 SEC

IOC GROWTH REQUIREMENTS: 1.00 KIPC DATA PROCESSING INSTRUCTIONS PER CYCLE: 1.00 KIPC 75.00/DA REPETITION RATE: 45.00/DA 10.00 KBYTES PROCESSOR MEMORY: PROGRAM SIZE: 10.00 KBYTES DATA REQUIREMENT: 10.00 KBYTES 15.00 KBYTES DATA STORAGE: SECONDARY: 0.00 KEYTES 0.00 KBYTES PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

ARCHIVAL: 0.00 KEYTES 0.00 KEYTES

+ OF DISPLAYS: 0 0

20-JUL-1985

SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 7.3.1 NAME: ANALYZE SYSTEM OPERATION

DATA SOURCES:

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE:

0.00 msec

COMMAND/CONTROL: LEVEL: I

LOCATION: G

RATE: 0.01

DATA QUALITY: MAXIMUM BIT ERROR RATE:

1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: S

PHYSICAL LOCATION CODE: G

DIAGNOSTICS/SELF TEST: REQUIRED: N

NUMBER:

O INTERVAL:

0.00 SEC

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 1000.00 KIPC 1000.00 KIPC REPETITION RATE: 0.10/DA 0.10/DA 1000.00 KEYTES 1000.00 KEYTES PROCESSOR MEMORY: PROGRAM SIZE: 1000.00 KBYTES DATA REQUIREMENT: 1000.00 KBYTES DATA STORAGE: SECONDARY: 0.00 KBYTES 0.00 KBYTES PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS ARCHIVAL: 0.00 KBYTES 0.00 KBYTES

\* OF DISPLAYS:

2

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 7.3.2 NAME: UPDATE TECHNICAL DOCUMENTS

DATA SOURCES:

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE:

0.00 msec

COMMAND/CONTROL: LEVEL: I LOCATION: N RATE: 0.01

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I PHYSI

PHYSICAL LOCATION CODE: G

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH
DATA PROCESSING INSTRUCTIONS PER CYCLE: 10.00 KIPC 10.00 KIPC
REPETITION RATE: 0.10/DA 0.10/DA

PROCESSOR MEMORY: PROGRAM SIZE: 10.00 KBYTES 10.00 KBYTES
DATA REQUIREMENT: 100.00 KBYTES 100.00 KBYTES

DATA STORAGE: SECONDARY: 5000000.00 KBYTES 5000000.00 KBYTES

PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS ARCHIVAL: 0.00 KBYTES 0.00 KBYTES

OF DISPLAYS: 0 0

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 7.3.3 NAME: ANALYZE PROGRAM CHANGES

DATA SOURCES:

**METHODOLOGY:** 

RESPONSE TIME: I/O DELAY ALLOWABLE:

100000.00 msec

COMMAND/CONTROL: LEVEL: A

LOCATION: G

**RATE:** 0.01

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I

PHYSICAL LOCATION CODE: G

DIAGNOSTICS/SELF TEST: REQUIRED: N

NUMBER: O INTERVAL:

0.00 SEC

GROWTH

0.00 KIPC

REQUIREMENTS: IOC DATA PROCESSING INSTRUCTIONS PER CYCLE: 100.00 KIPC 0.10/DA REPETITION RATE:

PROCESSOR MEMORY: PROGRAM SIZE:

1000.00 KBYTES 1000.00 KEYTES 0.00 KEYTES

0.00 KBYTES 0.00 KBYTES

DATA REQUIREMENT: DATA STORAGE: SECONDARY: PERISHABILITY: ARCHIVAL:

0.00 KEYTES

0.00 KEYTES 0.00% IN 0.00HRS 0.00% IN 0.00HRS 0.00 KBYTES

0.00/

+ OF DISPLAYS:

0

1

SSDS FUNCTIONAL DATA SHEET 20-JUL-1985

FUNCTION NO: 7.3.4 NAME: TRANSMIT PROCEDURES

DATA SOURCES:

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE:

100000.00 msec

RATE:

COMMAND/CONTROL: LEVEL: A,I

LOCATION: O

0.01

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I

PHYSICAL LOCATION CODE: G

DIAGNOSTICS/SELF TEST: REQUIRED: N O INTERVAL: 0.00 SEC NUMBER:

REQUIREMENTS: IOC GROWTH DATA PROCESSING INSTRUCTIONS PER CYCLE: 10.00 KIPC 10.00 KIPC 1.00/DA REPETITION RATE: 2.00/DA PROCESSOR MEMORY: PROGRAM SIZE: 10.00 KBYTES 100.00 KBYTES 10.00 KBYTES DATA REQUIREMENT: 100.00 KBYTES 0.00 KBYTES DATA STORAGE: SECONDARY: 0.00 KEYTES PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

0.00 KEYTES ARCHIVAL: 0.00 KBYTES

\* OF DISPLAYS: 0 0 20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 7.4.1 NAME: MONITOR CUSTOMER INVENTORIES

DATA SOURCES:

**METHODOLOGY:** 

RESPONSE TIME: I/O DELAY ALLOWABLE:

100000.00 msec

RATE:

COMMAND/CONTROL: LEVEL: A

LOCATION: G

0.01

0.00 SEC

DATA QUALITY: MAXIMUM BIT ERROR RATE:

1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I

PHYSICAL LOCATION CODE: G

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: O INTERVAL:

REQUIREMENTS: IOC GROWTH
DATA PROCESSING INSTRUCTIONS PER CYCLE: 100.00 KIPC 100.00 KIPC
REPETITION RATE: 30.00/DA 30.00/DA
PROCESSOR MEMORY: PROGRAM SIZE: 100.00 KEYTES 100.00 KEYTES

OCESSOR MEMORY: PROGRAM SIZE: 100.00 KBYTES 100.00 KBYTES
DATA REQUIREMENT: 10000.00 KBYTES 10000.00 KBYTES
DATA STORAGE: SECONDARY: 0.00 KBYTES 0.00 KBYTES

PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS
ARCHIVAL: 0.00 KBYTES 0.00 KBYTES

OF DISPLAYS: 3

20-JUL-1985

SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 7.4.2 NAME: MONITOR STATION INVENTORIES

DATA SOURCES:

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE:

100000.00 msec

COMMAND/CONTROL: LEVEL: A.I

LOCATION: N

RATE:

0.01

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G

PHYSICAL LOCATION CODE: G

IOC

DIAGNOSTICS/SELF TEST: REQUIRED: N

NUMBER: O INTERVAL:

0.00 SEC

REQUIREMENTS: DATA PROCESSING INSTRUCTIONS PER CYCLE:

100.00 KIPC 1.00/HR

GROWTH 100.00 KIPC 1.00/HR

REPETITION RATE: PROCESSOR MEMORY: PROGRAM SIZE:

100.00 KEYTES 1000.00 KEYTES 700000.00 KBYTES

100.00 KBYTES 2000.00 KBYTES 700000.00 KBYTES

DATA REQUIREMENT: DATA STORAGE: SECONDARY: PERISHABILITY: ARCHIVAL:

0.00% IN 0.00HRS 0.00% IN 0.00HRS O.OO KEYTES

0.00 KBYTES

+ OF DISPLAYS:

3

20-JUL-1985 SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 7.4.3 NAME: MONITOR GROUND FACILITY INVETORIES.

DATA SOURCES:

METHODOLOGY:

RESPONSE TIME: I/O DELAY ALLOWABLE:

100000.00 msec

COMMAND/CONTROL: LEVEL: A LOCATION: G RATE: 0.01

DATA QUALITY: MAXIMUM BIT ERROR RATE: 1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: I PHYSICAL LOCATION CODE: G

DIAGNOSTICS/SELF TEST: REQUIRED: N NUMBER: 0 INTERVAL: 0.00 SEC

REQUIREMENTS: IOC GROWTH
DATA PROCESSING INSTRUCTIONS PER CYCLE: 100.00 KIPC 100.00 KIPC
REPETITION RATE: 1.00/DA 1.00/DA

PROCESSOR MEMORY: PROGRAM SIZE: 100.00 KBYTES 100.00 KBYTES 2000.00 KBYTES

DATA STORAGE: SECONDARY: 600000.00 KEYTES 600000.00 KEYTES PERISHABILITY: 0.00% IN 0.00HRS 0.00% IN 0.00HRS

ARCHIVAL: 0.00 KBYTES 0.00 KBYTES

OF DISPLAYS: 3

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20-JUL-1985

SSDS FUNCTIONAL DATA SHEET

FUNCTION NO: 7.5 NAME: CONFIGURATION MANAGEMENT

DATA SOURCES:

METHODOLOGY: ENGINEERING ESTIMATE

RESPONSE TIME: I/O DELAY ALLOWABLE:

100000.00 msec

COMMAND/CONTROL: LEVEL: A

LOCATION: G

RATE: 0.01

DATA QUALITY: MAXIMUM BIT ERROR RATE:

1.00 E -6

SYNCHRONIZATION WITH:

SYSTEM DEPENDENCY CODE: G

PHYSICAL LOCATION CODE: G

DIAGNOSTICS/SELF TEST: REQUIRED: Y NUMBER: 0 INTERVAL: 10000.00 SEC

GROWTH

REQUIREMENTS: DATA PROCESSING INSTRUCTIONS PER CYCLE: REPETITION RATE: PROCESSOR MEMORY: PROGRAM SIZE: DATA REQUIREMENT:

DATA STORAGE: SECONDARY: PERISHABILITY:

ARCHIVAL: \* OF DISPLAYS: IOC 1.00 KIPC 0.10/DA 1.00 KIPC 0.10/DA 5.00 KBYTES 5.00 KBYTES 2.00 KBYTES 2.00 KBYTES 0.00 KEYTES 0.00 KBYTES

0.00% IN 0.00HRS 0.00% IN 0.00HRS 0.00 KEYTES 0.00 KBYTES 0

0

### APPENDIX H FUNCTION ALLOCATION MATRIX

### APPENDIX H

### FUNCTION ALLOCATION MATRIX

The hierarchial functions list developed in task 1 has been reviewed and allocated to subsystems and location based on task 3 trade studies and task 4 analysis. This appendix contains the results of that allocation.

The matrix is divided into four sets of tables. The first set documents the assignments to the space and ground systems. The first two columns show loc allocation and the second two columns show the growth allocation. The next set of four columns show the allocation to the spacecraft systems. STAI is the Space Station and its associated ground facilities. Similarly, COP and POP allocations include their ground facilities. Common refers to facilities whose function is common to the three systems, such as the Data Handling Center.

The second set of tables shows the allocation to ground facilities. The identifiers are all standard, and will not be repeated. The third set of tables shows the allocation to onboard subsystems defined in the reference configuration. The facility set shows the allocation to Space Station modules. LOG is the logistics module, and the rest of the locations are self explanatory.

No specific allocation of platform functions to platform physical locations has been attempted. These decisions were left to the discretion of the platform designers.

Table H-1. Function Allocation to Systems

26-X0V-1985	2		GROWTH LO	LOCATION   GROUND	STATION   COP	COL		ASSIGNMENT
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Ancillary Data Acquisition		×		×				×
Level O Customer Data Processing		_ ×		- ×				
Customer Data Accounting	G	_    ×		×	•	*	×	
Routing and Transmission		_		×	<b>*</b>	< ×	×	
Manage Deliverable Core Date		_	-	×	×	×	×	
Core Data Interface namegement				\   	* ×	×	×	
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Treatment Support  Treatment Sup		  - 	×	- ×	٠ ١			
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EMU Containation Control  EMU Monitor and Maintenance  EMU MONITOR AND MAINTENANCE  EMU MONITOR EMU MAINTENANCE  EMU MAI	G. 4 NVA Support	×	×					
Committor and Maintenance  Barety Interlace and Maintenance  HIVI Houltor and Maintenance  Ext. Atlance Angels and Composition Catrl  X	.3.4.1 IMU Contamination Control	X	×	*				
EMU Monitor and Maintenance  Ext. Rail formation  Ext. Rail formation  Ext. Rail Time Monitor & Control  Airlock Amengharic Freshure and Composition Ghtrl  Ext. Rail Information  Airlock Amengharic Freshure and Composition Ghtrl  Ext. Rail Information  Airlock Amengharic Freshure and Composition Ghtrl  Ext. Rail Rail Ext. Rail Rail Rail Rail Rail Rail Rail Rail		×	×		*			
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Airlock Atmospheric Fressure and Composition Cutri X		×	×	_	×			
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Environment Determination  Environment Honitor  Tracking Services  Tracking Services  Tracking Services  Honitor Gore Systems Status  Honitor Gustomer Systems Status  Honitor Customer Systems Status		×	× -	-	  -  -	*		
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Table H-1. Function Allocation to Systems (Continued)

	LOCATION   GROWTH LOCATION   VENICAL/SISTINGER COHMON GROUND   COP   FOF   COHMON	× - ×		x	- -    -  -  -		×		×	×			×			×	× × ×		x	x				×		X	 	 ×				 					×			X			
Table H-1. Function Allocation to Systems (Continued)	Ħ	NOMBER HARE	4.8.4.8 Fault Correction	Trend Analysis		G COMPAND INTERFERENCE PROCESSING	Manage Wachington and headthcos	. I TREBUG LINGE SYSTEM INC	indete Access And Synchronisation	_'-	Mann Memory Resource Mant	Archival Storage	Device Mgst	G CHER 1/2 from the control man and the contro	Load Scheduling		HELCHELLMBELON & CONT.MC.T.C.C. CO	4	Reconfigure/Disconnect Paylonds and Core Systems	Device Mat	CEBG 1/1 Frocessing	Device Hanagement	1. G. Blaylay and Control Command Interface management	æ	G.D.1 Interface management	n. pr. menagair faconfiguration schedule	B. B Adjust for Unscheduled Hode Chang	6.1 Interpret Model Requests Model Configuration	Develop Communications :: Communication Sever Communication Sever	nevelor mardware integration Con	a gimulate Space Station Elements		6.8 Conduct reministration of the conduct of the co	a a Define Training Script	Define Model Requirements	Configure Simulation	Conduct	atus	Develop Software	1 Configuration Control and Banasaemen	Requirement Amerys: 2 Contraction	o a masting and Analysis	

Table H-1. Function Allocation to Systems (Continued)

Function Allocation to Systems (Continued)	H IOC LOCATION   GROWTH LOCATION     VEHICLE/SYSTEM ASSIGNMENT	
86-MOV-1985 Table H-1. Function Allc	FUNCTION FUNCTION MANEE MANEE	6.9.6 Documentation 6.9.7 Communication 6.9.7 Communication 6.9.8 Reconfiguration Data Hanagement 7.0. Haintain Ingegrated Logistics Flan 7.1.1 Analyze System Ferformance 7.1.2 Determine Effects On Integrated Flan 7.1.3 Analyze Impact of Program Changes 7.1.4 Analyze Impact of Program Changes 7.2 Haintain Technical Documentation 7.3.8 Update Frogram Changes 7.3.9 Analyze System Changes 7.3.4 Transmit Procedures 7.3.5 Analyze Stopram Changes 7.4.1 Honitor Gustomer Inventories 7.4.2 Honitor Gustomer Inventories 7.4.3 Honitor Ground Facility Inventories 7.4.3 Honitor Ground Facility Inventories 7.5.5 Configuration Management

FUNCTION NUMBER	FUNCTION WANTE	2000	POGG	2	DHC	EDC	POPCC	COPCC	CIF	СОНИ	SEX
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0.	Tringle Classical Company of the Methods										-
1.1	Acquire Realtime Data										-
1.1.8	Prioritize Realtime Data					-					-
1.1.3	Monitor Realtime Data										-
1.1.4	Dispatch Mealtime Date										
1.1.5	Monade Delayable Data Return										-
 	Acquire Delayed Payload Data										
8.8	Prioritize Delayed Data										
1.8.3	Monitor Delayed Date										
1.8.4	Dispatch Delayed Date		_		×						-
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	Preprocessing				×						
1.3.B	Data Capture				×						
1.3.3	Monting and dranger was on			•	<u> </u>					×	
1.3.4	Quality Verizing to			*						×	
	Dental Date Interface Mat			×					-	× ;	
7 · •	Gracoser Date Gaptere			×						×	
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1.4.4	Ancillary Data Acquisition	_		×						×	
1.4.8	Level O Castomer Date Frondssing			×	 					×	
1.4.0	Contober Deta Accountains		  -  -	4			×	×			_
1.4.7	Mosting and Little core Data	×	<u> </u>  -	<u> </u> -			×	×	_	_	
	Core Data Interface Management	<b>*</b>					×	× ,	<u> </u>	  -  -	
	Core Data Capture	×					×	× >	 -¦-		
	Data Extraction	×					×	<u> </u>			
1.8.4	Displays and Controls	×				× •	× >	<b>*</b>	  -		
1.8.8	Ingineering Data Analysis	<b>×</b>			<u> </u> _¦.	4	•		_		
1.5.6	Core Data Accounting		•		<u> </u> -	  -	×	×			×
0.	Danabada Cira Comenda Data	•	<u>ا</u> -		  -	  -		_	_	  -	
æ c	Check MNDS Nervice Requirements	*	  -				×	×	 -¦-	  -  -	
: ci	Validate Core Commands/Data	×					×	<	  -  -		
B. G.1	Authorize Operator	×		_	- :	<u> </u> -¦.	<u> </u>		  -		
8. U. B	Authorise Operation			<u> </u>	  -  -	  -  -		  -	_		
4.9	Provide Ancillary Deve	_	-  -	  -  -				_			_
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8.5.4.1	ONV mervice										

GFH

NDC | DHC | EDC | FOFCC | COFCC | GIF | COHH

SECC | POCC

<u>-</u> `- ·		ORIGINAL PAGE IS OF POOR QUALITY
FUNCTION	OMV Checkout # Diagnostics OMV Deployment/Retrieval Remote Operations Control OMV Operation OMV Status Customer Payload Checkout/Service Customer Payload Checkout/Service Schedule and Execute Operations Develop Recurring Operations Hasters Develop Hormal Day Payload Operations Develop Hormal Day Payload Operations Develop Hormal Day Core System Operations Develop Hormal Day Core System Operations Develop Hormal Day Core System Operations Develop Short Term Schedules Incorporate New/Revised Operations Check for Termine Capabilities Resolve Conflicts Maintain Short Term Schedules Resolve Conflicts	s schedule ode Changes ons rations hanges hanges t Determin.
FUNCT 10W		

Table H.2. Function Allocation to Ground Facilities (Continued)

26-HOV-1985

E O	FUNCTION	SSCC	POCC	EDC -	DHC	EDC	POPCC	COPCC	CIF	СОИН	GEH
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	Contact Habitata Mxerciae	¥		*		<b> -</b>	×	×	×	_	-
	Toningte Obergtor Performance	×		<			×	×	×		-
	Maintain Operator Training Status								×	-	-
							-		×	-   	_
	Configuration Control and Management Support					- 			×	-	
α • α	-				-	-	-		×		
	Design and Code Generation					- 			×		
	Build and Delivery					-			×		
•	Testing and Analysis							-	- ×		
	Documentation			-	-	-	-		×		
	Communication				-				- ×		
	Reconfiguration Data Manafement	*			- 		_	-	-   -		
0.7	Support Space Station Program	*			-    -	_   	-				,
1.7	Maintain Infegrated Logistics Flan	×				<u>-</u>	×	×			<u> </u>
7.1.1	Analyze System Performance	×			-    -		-				
7.1.8	Determine Effects On Integrates Link	×				- 					
7.1.3	Analyze Affected Flans	×			_    -	-					
7.1.4	Analyze Ispact of Wromina Changes	×				-					-
a 1	Log Customer cases of Systems Inches the Control of Con	×				-	×	×			×
7.8.1	Analyze System Operation	< ×									
7.3.8	Update Technical Documents	×									
7.3.3	Analyze Profram Chanfes	×	_			-					-
7.3.4	Hrangalt Procedures	×					-				
7.4	Control Inventories	×				-					
7.4.1	Monitor Customer Inventories	×									
7.4.8	Monitor station inventories	×			-						
7.4.3	Monitor Ground Factily inventories	×									

ORBIT END ITEM ASSIGNMENT

HANE  Hanage Customer/Operator Delivered Data  Hanage Real Time Data  Acquire Realtime Data  Prioritize Realtime Data  Prioritize Realtime Data  Dispatch Realtime Data  Format Realtime Data  Format Realtime Data  Dispatch Realtime Data  Format Realtime Data  Format Realtime Data  Format Realtime Data  Format Belayed Payload Data  Prioritize Delayed Data  Dispatch Delayed Data  Dispatch Delayed Data  Format Delayed Data  Dispatch Delayed Data  Format Delayed Data  Format Delayed Data  Format Delayed Data  Dispatch Delayed Data  Format Delayed Data  Gustomer Data Reculation  Elevel O Customer Data Forcessing  Gustomer Data Accounting  Gustomer Data Accounting  Forter Edla Interface Managements  Validate Deliverable Gore Data  Forter Edla Interface Managements  Validate Deliverable Gore Data  Authorize Operation  Forter Edla Forcessing  Gustomer Eayload Commands/Data  Authorize Operation  Forter Bata Frocessing  Gustomer Payload Operations  Gustomer Payload Operations  Gustomer Payload Operations  Gustomer Payload Operations  OTV Operation  OTV Operation  OTV Operation  OTV Operation
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4.1.0.1 Attitude and irpusioned control									

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	Pointing Mount Control	-	-'-   			×	_	   	-	
10.10	Device Mat		-	-		×	_   	-	_	
4.1.3.6	Cand 1/F Processing		- 	-		×	-	-		
4.1.4		_				×	-			
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4.1.4.8		_				×	- 	- <u>'</u> -		
4.1.4.3	Schedule Debloyment/ hendervott	'  _		-		× 1	-	-		
4.1.4.4	Manage Rendervous	_	-	-		×		· 		
4.1.4.5	Target Collision Avoidance	_    -				4	-   	- <u>'</u> -		
4.1.4.0		-    -	-			4				
4.1.5	Tracking Tracking	_	-			<b>4</b> ×		.'-   		
4.1.9.1	tong wange colors					×		-		
	Object Catalog Maintenance					×		-   		
4.8.1.4	Tracking Data Conditioning					   				
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4.1.5.6	CHEC		×					-   		
4.1.0			×				-	- <u>-</u> 		
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4.8.4.3				*						
4.8.4.4	Grey Water Beat			×		_				
4.03.4.03										

Table H.3. Function Allocation to Space Station/Platform Subsystems (Continued)

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ORBIT END ITEH ASSIGNMENT

FUNCTION FUNCTION	CRT	IDMS	ECIS	P/L ACC	CHEC	HAB	NAS.	POWER	THERMAL	-, <b>-</b>
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Communication	×					- <u>'</u> - 	· -			
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Communication Equipment	×					: 	-   			·-,
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4.8.8.7 Helemetry Control						×				-,
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4.3.3.8 Crew/			_			*			_	-
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4.8.4				 	 -¦-	×		_		- 
4.3.4.1 EMU Contemination Control						×				-
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4.4			_			*			_	- 
EVA			_			*			_	- 
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ORBIT END ITEM ASSIGNMENT

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# ORBIT END ITEM ASSIGNMENT

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Table H-4. Function Allocation to Space Station Modules (Continued)

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### SPACE STATION HODULE ASSIGNMENT

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4.1.3.3	Mosentus Management	-	-							×
	Pointing Mount Control		-							_
	Device Ment	*	×	-   						-
	CHEC I/F Processing		×	-						-
	Traffic Control		×							-
-	Compate/Probate Constants terms for	-    -	×							-
	Manage Constellition Orbic named		×							_
4.3	Schedule Deployment/Renues Cort		×							-
4.1.4.4	Hanafe Rendervous		×				<u> </u>			_
4.1.4.5	Target Collision Avoidance	×	×		-    -					_
	CHEC 1/F Processing		×		-    -					_
	Hracking.		×							_
	Long Range Object Tracking		×		-    -					_
4	Proximity Tracking		×							-    -
1.5	Object Catalog Maintenance		×							_
4.1.5.4	Tracking Data Conditioning		×							-
1.0.0	Device Mint	×	×							
4.1.5.6	Chad I/F Processing	_	×							
4.1.6	Time and Frequency Management		×						-	_
4.1.6.1	Time Source Mint		×						-	-
4.1.6.8	Time Update		×							
4.1.6.3	Frequency Source sanagement		×							
4.1.6.4	Device Mat	×	×							-
4.1.6.5	CEEC I/W WYOCOMBINE			_			  -			
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	Myslaste Afriky for Committee	×	*	1						<  >
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B. H. G	WHOLEGE AMERICAN STREET	×	4	<u> </u>				-		
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G. G.	Thermal Device Management	_	×							-
4.8.8.3	Project Thermal Load Capacity	×	×				-			
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4.8.3.8	MRMS Operation	×	-	  -  -	*	×		_	×	
4.8.3.3	Manage Docking/Bertming	×	×	×	•					
4.8.3.4	Device Mart	×	× ,	\ -¦-	  -  -					
4.8.3.5		×	  -  -	,	×	×				
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Table H-4. Function Allocation to Space Station Modules (Continued)

SPACE STATION HODULE ASSIGNMENT

26-HOV-1985

HAB2   IAB1   IAB2   AIRLOCK   LOG   UPPERKEEL   LOWERKEEL   BOOH			
R HANE R HANE 6 Device Mgmt 7 Camal 1/F Processing	Communication Metwork Control Communication Equipment Control Communication Equipment Status Monitoring Failure Detection/Recovery Command Processing Command Processing	Telemetry Control  Support Flight Grew Activities  Support Flight Grew Activities  Health Haintenance  Trew Physiologisal Homitoring  Treatment Support  Treatment Support	EWA Supporte  RATE ENU Contamination Control  REMU Monitor and Maintenance  Safety Interlock Monitor & Control  Safety Interlock Monitor & Control  Safety Interlock Monitor & Control  Safety Interlock Tessure and Composition Cni  Airlock Atmospheric Pressure and Composition Cni  Airlock Atmospheric Pressure and Composition Cni  Airlock Temperature and Mumidity Control  Airlock Temperature and Mumidity Control  Airlock Temperature Support  Airlock Temperature Support  Airlock Temperature Support  Airlock Temperature Support  Anntenance W Repair Procedures  A General Data Processing Support  General Purpose Programming Language  A General P

Table H-4. Function Allocation to Space Station Modules (Continued)

SPACE STATION MODULE ASSIGNMENT

26-NOV-1985

				004	ATRIOGK	100	UPPERKEEL	LOWERKEEL	BOOH
FUNCTION FUNCTION	HABI	HABS	1881						
			_ ×	-					
4 4.1.4 Relative Alignment Determination			×	-   					
		-    -	×	-					
A A Tracking Services			<u>-</u>	-		-			_
Monitor		×		-					
-			×						
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5.1.1.1 Update/Access And synchronical		×							
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		×							
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district Common to the Colonia Market		*							
Control of the contro	_								  -
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T. O. H. PROTING OF STREET		*							
	System							-	_
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a . o . Device Ment		×							_
		×				  -			  -
Displays & Controls		×				<u> </u>			
1 Display and Control Device Hanagement	Manafemen!	×					-		
Display and Control Command American					-	_	-		
the state of the s		\ -\ -\	  -  -	  -  -					
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a o o schedule/status Compare		\ -\-							
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	_	×	_			<u> </u>			
Develop, Simulate, Integrate and in						\ -\-			-
Interpret Model Requests	- uo								  -
Develop Communications and Communication Sys. Communication Sys. Communication Sys.	n Elemei	- -,	  -						-
	-	_	_	_		-			-
A Develop Hardware Integration Configuration	uo uo								
	uo				<u> </u> 	 - -			
Develop software Integration Const.			-	  -					
6.7 statiste Space Station Frommittee	İ								

Table H-4. Function Allocation to Space Station Modules (Continued)

MEN
RICK
7
LTHUCK
MOTEVE

FUNCTION	FUNCTION		TARO.	LABL	LAB2	AIRLOCK	1 TOG -	UPPERKEEL	LOWERKEEL	BOOH
NUMBER								_		
		-	×	_	-		-  -			
8.8	Conduct Training		*				_			
	Define Training Flan		•				-    -			
	Define Training Script									
	nefine Model Requirements		١							_
			×							_
<b>9.8.</b>			×		-    -					
8.8.9	Conduct Training Exercise	      -	×		_		-    -			
6.8.6	Evaluate Operator Feriormance		*				_			
	Maintain Operator Training Status						_			
						-				_
	ntrol and Management	-    -								_
7.0	24	- 								_
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4.8.4	Build and Delivery						-			
	Testing and Analysis						_			-
	Documentation									_
										-
	and the first to the Management									
B .			×							_
4.0										
7.1	Meintein ingestates Lostates Line		_		-		-			
7.1.1	Analyze System Ferformance			    -	_		-			
7.1.8	Determine Iffects On Integrated Flan						_			  -
7.1.3	Analyse Affected Flans						_		_	
7.1.4	Analyze Impact of Profram Changes						_			-
0	Log Customer Usage of System						_			_
	Maintain Technical Documentation						  -			
	Analyze System Operation						_		_	- -
1	indate Technical Documents						  -			-
	Analyse Profram Changes									_
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	Zolitor Certoser Investories									-
	Monte of the factor of the factories								-	_
# · ·	monitor actual Technical Inventories			_						_
7.4.0	Conficer Communication			_	-					